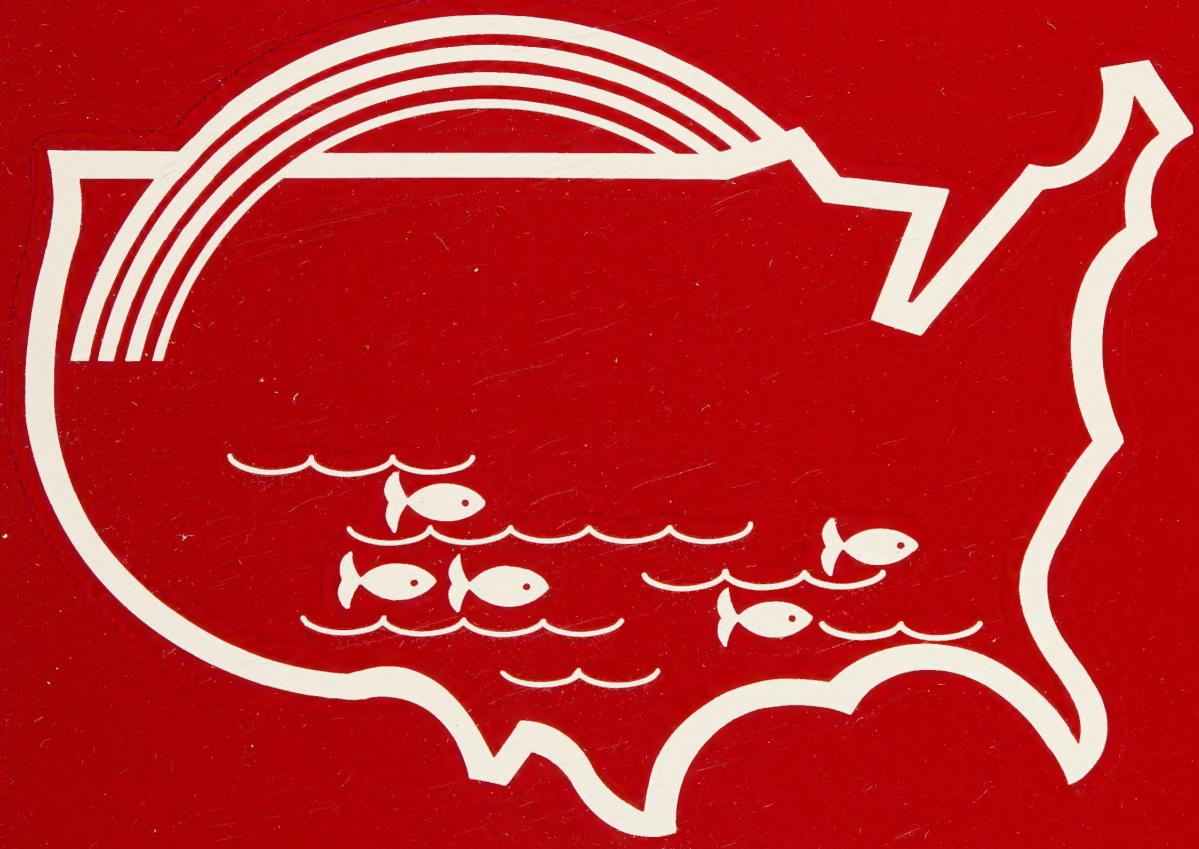
Current Fishery Statistics No. 8900

# Fisheries of the United States 1989

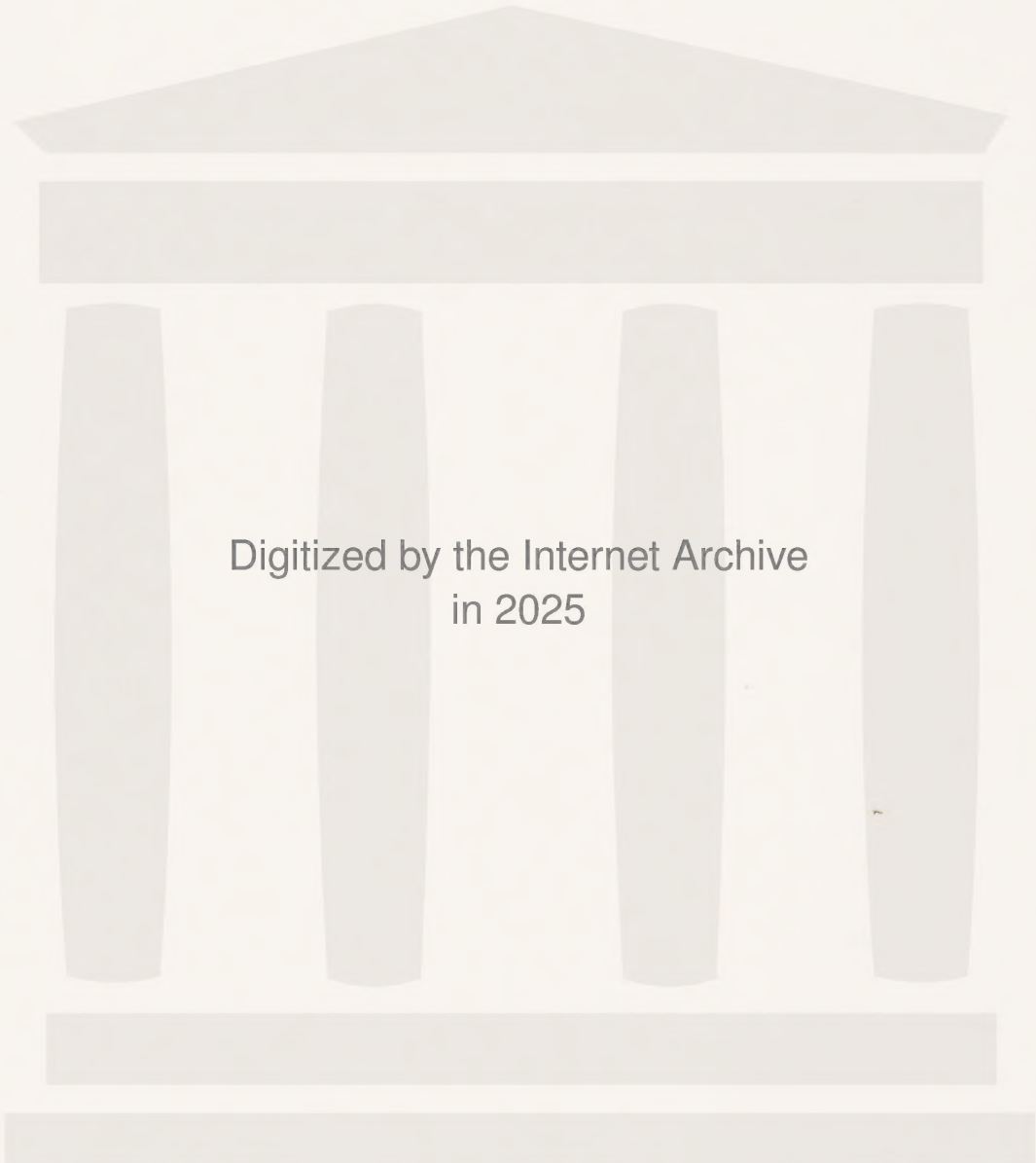
May 1990



U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

National Marine Fisheries Service


Digitized by the Internet Archive
in 2025

https://archive.org/details/fisheries-of-the-united-states_1989

Current Fishery Statistics No. 8900

# Fisheries of the United States, 1989

Prepared by:
Fisheries Statistics Division

Mark C. Holliday, Acting Chief
Barbara K. O'Bannon, Editor

Silver Spring, MD
May 1990

**U.S. DEPARTMENT OF COMMERCE**
Robert A. Mosbacher, Secretary

**National Oceanic and Atmospheric Administration**
John A. Knauss, Under Secretary

National Marine Fisheries Service
William W. Fox, Jr., Assistant Administrator

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

# PREFACE

## FISHERIES OF THE UNITED STATES, 1989

This publication is a preliminary report for 1989 on commercial and recreational fisheries of the United States and foreign catches in the U.S. Exclusive Economic Zone (EEZ). This annual report provides timely answers to frequently asked questions for the previous year.

## SOURCES OF DATA

Information in this report came from many sources. Field offices of the National Marine Fisheries Service (NMFS), in cooperation with various States, collected and compiled data on U.S. commercial landings and processed fishery products. The NMFS field offices compiled data on the foreign catch from reports submitted by designated foreign officials. The NMFS Fisheries Statistics Division in Silver Spring, MD, managed the collection and compilation of recreational statistics, and tabulated and prepared all data for publication. Sources of other data appearing in this publication are: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, U.S. Coast Guard, U.S. Customs Service, U.S. Department of the Interior, U.S. Department of Agriculture, Food and Agriculture Organization (FAO) of the United Nations (Rome), and the countries fishing in the U.S. EEZ.

## PRELIMINARY AND FINAL DATA

Data on U.S. commercial and recreational landings, foreign catches, employment, prices, and production of processed products are preliminary for 1989. Final data will be published in Fishery Statistics of the United States and other NMFS Current Fishery Statistics publications.

## DEFINITIONS - (See Glossary)

As in past issues of this publication, the units of quantity and value are defined as follows: U.S. landings and foreign catch are shown in round weight (mollusk shells excluded), unless otherwise noted; quantities shown for U.S. imports and exports are in product weight, as reported by the U.S. Bureau of the Census, unless otherwise noted; the value of the U.S. domestic commercial catch is exvessel; the value for U.S. imports is generally the market value in the foreign (exporting) country and, therefore, excludes U.S. import duties, freight charges from the foreign country to the United States, and insurance; the value for exports is generally the value at the U.S. port of export, based on the selling price, including inland freight, insurance, and other charges. Countries and territories shown in the U.S. foreign trade section are established for statistical purposes in the Tariff Schedules of the United States Annotated (Tariff Commission) and reported by the U.S. Bureau of the Census.

## SUGGESTIONS

The Fisheries Statistics Division wishes to provide the kinds of data sought by users of fishery statistics, and welcomes any comments or suggestions that will improve this publication.

Address all comments or questions to:

Fisheries Statistics Division, (F/RE1)
National Marine Fisheries Service, NOAA
1335 East-West Highway, Room 8313
Silver Spring, MD 20910
301-427-2328

---

The Fisheries Statistics Division of NMFS takes this opportunity to thank members of states, industry, and foreign nations who provided the data that made this publication possible.

Program leaders of the field offices were: Ronnee Schultz and Robert A. Hall, New England, Middle Atlantic, Chesapeake and Great Lakes States; Richard Raulerson and Ernest Snell, South Atlantic and Gulf States; Patricia J. Donley, California and Hawaii; John K. Bishop, Oregon and Washington; and Janet Smoker, Alaska.

Members of the Fisheries Statistics Division in Silver Spring, who helped with this publication were: Margret Dancy, Edward Dickens, Ronald Essig, Ray Glass, Deborah Hogans, Mark Holliday, Willie Mae Holloway, Steven Koplin, Debbie Marks, Marta Nammack, Barbara O'Bannon, Robert Rosette, Richard Schween, David Sutherland, William Uttley, Lelia Wise, and John Witzig.

# CONTENTS


Page

*PREFACE AND ACKNOWLEDGEMENT*..... ii

*REVIEW*..... iv

*U.S. COMMERCIAL FISHERY LANDINGS:*
- Species..... 1
- Disposition..... 3
- States..... 4
- Regions..... 4
- Ports..... 5
- Catch by species and distance from shore (thousand pounds)..... 6
- Catch by species and distance from shore (metric tons)..... 10
- Historical--American lobster by regions.. 14
- Historical--spiny lobster by regions..... 15

*U.S. JOINT VENTURE CATCHES*..... 17

*U.S. MARINE RECREATIONAL FISHERIES*..... 18

*U.S. EXCLUSIVE ECONOMIC ZONE:*
- Foreign catch, by continent and country.. 27
- Foreign catch, by species and area..... 28
- Foreign catch, by country and species.... 29

*WORLD FISHERIES:*
- U.S. and world..... 31
- Countries..... 32
- Continents..... 33
- Fishing areas..... 33
- Species groups..... 34
- Disposition..... 34
- Imports and exports, by leading countries..... 35

*U.S. PRODUCTION OF PROCESSED FISHERY PRODUCTS:*
- Value..... 37
- Fish sticks, fish portions, and breaded shrimp..... 37
- Fillets and steaks..... 38
- Canned..... 39
- Industrial..... 42

*U.S. COLD STORAGE HOLDINGS*..... 43

*U.S. IMPORTS:*
- Edible and nonedible..... 45
- Value and duties..... 45
- Principal items..... 46
- Continent and country..... 47
- Blocks..... 48
- Groundfish fillets and steaks, species..... 48
- Canned tuna and quota..... 49
- Shrimp..... 50
- Industrial..... 51

*U.S. EXPORTS:*
- Principal items..... 52
- Continent and country..... 53
- Edible and nonedible..... 54

Page

*U.S. EXPORTS - Continued:*
- Shrimp..... 55
- Salmon..... 56
- Crab..... 57
- Crabmeat..... 57
- Herring..... 57
- Industrial..... 58

*U.S. SUPPLY:*
- Edible and nonedible..... 61
- Finfish and shellfish..... 62
- Blocks..... 63
- All fillets and steaks..... 63
- Groundfish fillets and steaks..... 63
- Tuna..... 64
- Canned sardines..... 65
- Canned salmon..... 65
- Clam meats..... 65
- King crab..... 66
- Snow (tanner) crab..... 66
- Canned crabmeat..... 66
- Lobster, American..... 67
- Lobster, spiny..... 67
- Oysters..... 68
- Scallop meats..... 68
- Shrimp..... 69
- Industrial..... 70

*PER CAPITA:*
- U.S. consumption..... 72
- U.S. use..... 75
- World consumption-by region and country. 76

*PRICES, INDEX OF EXVESSEL*..... 78

*VALUE ADDED*..... 80

*EMPLOYMENT, CRAFT, AND PLANTS*..... 82

*FISHERY PRODUCTS INSPECTION*..... 85

*MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976 (MFCMA):*
- General..... 86
- Optimum yield, U.S. capacity, reserve, and allocations..... 89

*GENERAL ADMINISTRATIVE INFORMATION*..... 92

*PUBLICATIONS:*
- National Marine Fisheries Service..... 98
- Government Printing Office..... 99
- National Technical Information Service..... 100

*SERVICES:*
- Sea Grant Marine Advisory..... 102
- Fisheries Development..... 104
- Inspection.....Inside back cover

*GLOSSARY*..... 106

*INDEX*..... 110

# REVIEW

## IMPORTANT FACTS

**U.S. LANDINGS**. Commercial landings (edible and industrial) by U.S. fishermen at ports in the 50 states were a record 8.5 billion pounds (3.8 million metric tons) valued at $3.2 billion in 1989--an increase of 1.3 billion pounds (576,300 metric tons) in quantity, but a decrease of $281.8 million in value compared with 1988. Landings of major finfish species such as Atlantic and Pacific cod, Alaska pollock, and salmon increased. The 1989 average exvessel price per pound paid to fishermen was 38 cents compared to the 49 cents they received in 1988. Finfish accounted for 84 percent of total landings, but only 53 percent of the total value of finfish and shellfish.

Commercial landings by U.S. fishermen at ports outside the 50 states or transferred in the U.S. Exclusive Economic Zone (EEZ) onto foreign vessels (joint ventures) were an additional 2.2 billion pounds (994,000 metric tons) valued at $326.7 million. This was a 42 percent, or 1.6 billion pound (718,000 metric tons), decrease in quantity and a $163.1 million (33 percent) decrease in value compared with 1988. Most of these landings consisted of tuna landed at canneries in Puerto Rico, American Samoa and other foreign ports. Joint venture catches decreased significantly (see below).

Edible fish and shellfish landings in the 50 states were 6.2 billion pounds (2.8 million metric tons) in 1989--an increase of 1.6 billion pounds (733,000 metric tons) compared with 1988. Landings of shrimp, clams, Alaska pollock, crabs, Atlantic and Pacific cod, and salmon increased. Flounder and tuna landings decreased.

Landings for reduction and other industrial purposes were 2.3 billion pounds (1.0 million metric tons) in 1989--a decrease of 13 percent compared with 1988.

The U.S. marine recreational finfish catch in 1989 (excluding Alaska, Hawaii, and Pacific coast salmon) was an estimated 289.2 million fish. These fish weighed approximately 469.2 million pounds and were taken on an estimated 57.9 million fishing trips. The estimated number of U.S. marine recreational fishermen has been relatively stable over the last few years at 17 million.

**JOINT VENTURE CATCH IN THE U.S. EEZ**. Joint venture catches by U.S. fishermen unloaded onto foreign vessels were 771,000 metric tons (1.7 billion pounds) valued at $112.2 million. This was a 47 percent decrease in quantity over 1988, when 1.5 million metric tons (3.2 billion pounds) were caught, valued at $221.1 million. The major species were cod, flounders, Pacific hake, and Alaska pollock.

**FOREIGN CATCH IN U.S. EEZ**. The foreign catch of fish (excluding tunas) and shellfish in the U.S. EEZ was 37,200 metric tons (82.1 million pounds) in 1989, a 40 percent decrease compared with 1988 and 94 percent below the average for the preceding 5 years. The foreign catch off the North Atlantic U.S. EEZ supplied the largest share of the total (99 percent) followed by Alaska (less than one percent). There were no foreign catches in the U.S. EEZ off California, Oregon and Washington in 1989.

Atlantic mackerel comprised 99 percent of the foreign catch; butterfish, hakes, herrings and other fish and shellfish comprised the remainder.

The German Democratic Republic was the leading nation fishing in the U.S. EEZ with a catch of 18,000 metric tons, 48 percent of the total foreign catch. The USSR was the second leading nation fishing in the U.S. EEZ, with 11,000 metric tons representing 31 percent of the catch in 1989.

The 1989 foreign catch in the Pacific U.S. EEZ was only 122 metric tons, 18,216 metric tons (99 percent) less than 1988. Snails from the Eastern Bering Sea and Aleutian Islands were the only species harvested.

Foreign catches in the North Atlantic U.S. EEZ in 1989 were 37,100 metric tons, 6,200 metric tons (14 percent) less than the 1988 catch of 43,300 metric tons. The German Democratic Republic had the highest catch with 18,000 metric tons (49 percent), followed by the USSR with 11,500 metric tons (31 percent). Atlantic mackerel catches amounted to 36,800 metric tons (99 percent).

**U.S. VS. FOREIGN CATCH IN U.S. EEZ**. The combined catch by U.S. and foreign vessels in the U.S. EEZ was 2.7 million metric tons in 1989, a decrease of 269,000 metric tons (9 percent) compared with 1988. The U.S. share was 99 percent of the total, up 1 percentage point from 1988.

**WORLD LANDINGS**. In 1988, the most recent year for which data are available, world commercial fishery landings were a record 98.4 million metric tons--an increase of 4.6 million metric tons (5 percent) compared with 1987. Japan continued to be the leading nation with 12 percent of the total catch; the USSR, second with 11 percent; China, third with 10 percent; followed by Peru with 7 percent; and the United States with 6 percent.

**PRICES**. The procedure for calculating the index or exvessel prices for all fish and shellfish was reviewed and modified in 1986. In 1989 the index was

## IMPORTANT FACTS

recalculated for all years with 1982 as the base year to conform with government standards. The 1989 annual exvessel price index for edible fish and shellfish decreased 19 percent from 1988. The annual index for industrial fish decreased 16 percent from 1988.

**PROCESSED PRODUCTS**. The 1989 estimated value of the domestic production of edible and nonedible fishery products was a record $6.9 billion, $1.1 billion (18 percent) more than the $5.8 billion in 1988. The value of edible products was $6.4 billion--an increase of $944.1 million (17 percent) compared with 1988. The value of industrial products was $444.4 million in 1989--an increase of $116.1 million (35 percent) compared with 1988.

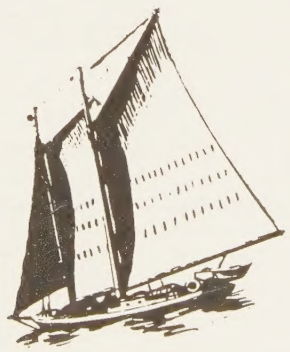
**FOREIGN TRADE**. The total import value of edible and nonedible fishery products was a record $9.6 billion in 1989--an increase of $732.4 million (8 percent) compared with 1988. Imports of edible fishery products (product weight) were 3.2 billion pounds (1.5 million metric tons) valued at $5.5 billion in 1989--an increase of 275.2 million pounds (9 percent) in quantity and $56.2 million (1 percent) in value compared with 1988. Imports of nonedible (i.e., industrial) products also set a value record in 1989, with products valued at $4.1 billion--an increase of $676.1 million (20 percent) compared with 1988.

Total export value of edible and nonedible fishery products of domestic origin was a record $4.7 billion in 1989--an increase of $2.4 billion (107 percent) compared with 1988. United States firms exported 1.4 billion pounds (623,200 metric tons) of edible products valued at $2.3 billion--an increase of 313.8 million pounds (142.3 metric tons) in quantity and $127.4 million in value compared with 1988. Exports of nonedible products were valued at $2.4 billion, $2.3 billion more than 1988. The $112.2 million received for U.S.-flag vessel catches transferred onto foreign vessels in the U.S. EEZ in joint venture operations are not included in the export statistics.

**SUPPLY**. The U.S. supply of edible fishery products (domestic landings plus imports, round weight equivalent) was 12.3 billion pounds (5.6 million metric tons) in 1989--an increase of 1.8 million pounds (17 percent) compared with 1988. The change reflects increases of 2 percent in imports and 35 percent in domestic commercial landings. Domestic commercial landings for industrial products of 2.3 billion pounds (1.0 million metric tons) were 345.0 million pounds less than 1988. The supply of industrial fishery products was 3.2 billion pounds (1.4 million metric tons) in 1989--a decrease of 906.0 million pounds (22 percent) compared with 1988.

**PER CAPITA CONSUMPTION**. U.S. consumption of fishery products was a record 15.9 pounds of edible meat per person in 1989, up 0.7 from the revised 1988 consumption of 15.2 pounds.

**CONSUMER EXPENDITURES**. U.S. consumers spent an estimated $28.3 billion for fishery products in 1989--an increase of $1.4 billion (5 percent) compared with 1988. The 1989 total includes $19.1 billion in expenditures in food service establishments (restaurants, carry-outs, caterers, etc.); $9.0 billion in retail stores (for home consumption); and $181.7 million for industrial fish products. In producing and marketing a variety of fishery products for domestic and foreign markets, the commercial marine fishing industry contributed $17.2 billion (In value added) to the U.S. Gross National Product (GNP)--an increase of $832.7 million (5 percent) compared with 1988.



# REVIEW

## OTHER IMPORTANT FACTS

Alaska pollock, with landings of 2.4 billion pounds (1.1 million metric tons), was the most important species in quantity in 1989, accounting for 28 percent of the commercial fishery landings in the United States, and was fourth in value.

Menhaden was the second most important species in quantity, but was low in value.

Salmon was the third most important in quantity and first in value.

Crabs were fourth in quantity and third in value.

Cod was the fifth most important in quantity, but was low in value.

Shrimp were sixth in quantity and second in value.

Lobster and scallops were the fifth and sixth most important species in value, respectively.

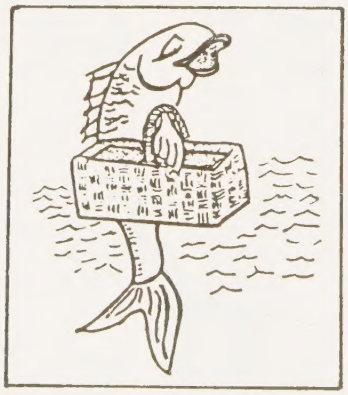
Tuna landings by U.S.-flag vessels at ports outside the continental United States amounted to 452.0 million pounds. Other species including Pacific cod, Pacific hake and flounders were landed at ports outside the United States and transferred on to foreign vessels in the U.S. EEZ.

Dutch Harbor-Unalaska, Alaska, was the leading U.S. port in quantity of commercial fishery landings, followed by Cameron, Louisiana; Pascagoula-Moss Point, Mississippi; Empire-Venice, Louisiana; Kodiak, Alaska and Dulac-Chauvin, Louisiana.

New Bedford, Massachusetts was the leading U.S. port in terms of value, followed by Dutch Harbor-Unalaska, Kodiak, Petersburg, and Kenai, Alaska.

Alaska led all states in volume with landings of 4.1 billion pounds, followed by Louisiana, 1.2 billion; Virginia, 692.8 million; California, 418.4 million; and Mississippi, 298.2 million pounds.

Alaska led all states in value with $1.2 billion, followed by Massachusetts, $272.8 million; Louisiana, $264.2; Florida, $185.9; and Texas, $170.1 million.



# REVIEW

## IMPORTANT SPECIES

**ALASKA POLLOCK AND OTHER PACIFIC TRAWL FISH**. U.S. landings of Pacific trawl fish (Pacific cod, flounders, Pacific hake (whiting), Pacific ocean perch, Alaska pollock, and rockfishes) were 3.0 billion pounds valued at $320.5 million--an increase of 68 percent in quantity compared with 1988.

Landings of Alaska pollock increased 88 percent to 2.4 billion pounds, more than five times higher than the 1984-1988 5-year average. Landings of Pacific cod were 372.1 million pounds -- an increase of 39 percent from 267.2 million pounds in 1988. Pacific hake (whiting) landings were 16.6 million pounds (up 5 percent from 1988) valued at $1.1 million (down 6 percent from 1988). The 1989 landings of Pacific hake were well below the 5-year average. Landings of rockfishes were 133.6 million pounds (8 percent higher than 1988) valued at $42.3 million. The 1989 rockfish landings were 33 percent higher than the 5-year average.

**ANCHOVIES**. U.S. landings of anchovies were 13.4 million pounds--an increase of 964,000 pounds (8 percent) compared with 1988. Almost all the landings were used for bait, while less than one percent went into animal food.

**HALIBUT**. U.S. landings of Atlantic and Pacific halibut were 75.2 million pounds (round weight) valued at $85.1 million--a decrease of 6.4 million pounds (8 percent), but an increase of $12.4 million (17 percent) in value compared with 1988. The Pacific fishery accounted for all but 45,000 pounds of the 1989 total catch. The average exvessel price per pound in 1989 was $1.13 compared with 89 cents in 1988.

**HERRING, SEA**. U.S. commercial landings of sea herring were 209.0 million pounds valued at $29.4 million--a decrease of 12.8 million pounds (6 percent) in quantity and $33.2 million (53 percent) in value compared with 1988. Landings of Atlantic sea herring were 89.7 million pounds valued at $5.0 million--a decrease of 740,000 pounds (1 percent) in quantity and $188,000 (4 percent) in value compared with 1988.

Landings of Pacific sea herring were 119.3 million pounds valued at $24.4 million--a decrease of 12.1 million pounds (9 percent) in quantity and $33.0 million (58 percent) in value compared with 1988. Alaskan landings were 96.9 million pounds valued at $18.7 million --a decrease of 17.0 million pounds (15 percent) and $32.2 million (63 percent) compared with 1988.

**JACK MACKEREL**. Landings of jack mackerel in 1989 were 28.4 million pounds valued at $1.9 million--an increase of 5.9 million pounds (26 percent) in quantity and $242,000 in value compared with 1988. The 1989 average exvessel price per pound was 7 cents.

**MACKEREL, ATLANTIC**. U.S. landings of Atlantic mackerel were 17.9 million pounds valued at $3.2 million--an increase of 3.2 million pounds (21 percent) in quantity and $1.2 million in value (62 percent) compared with 1988. Rhode Island was the leading state with 7.0 million pounds (39 percent) of the total catch. The average exvessel price per pound in 1989 was 18 cents, up 5 cents from 1988.

**MACKEREL, PACIFIC**. Landings of Pacific mackerel were 88.7 million pounds valued at $6.0 million--a decrease of 11.7 million pounds (12 percent) in quantity and $1.5 million (20 percent) in value compared with 1988. The average exvessel price remained stable at 7 cents per pound.

**MENHADEN**. The U.S. menhaden landings were 2.0 billion pounds valued at $84.5 million--a decrease of 97.3 million pounds (5 percent) in quantity, and $21.2 million (20 percent) in value compared with 1988. Landings increased by 24.8 million pounds (4 percent) in the Atlantic States and decreased 122.1 million pounds (9 percent) in the Gulf States compared with 1988. Landings along the Atlantic coast were 702.7 million pounds valued at $32.1 million. Gulf region landings were 1.3 billion pounds valued at $52.3 million. Menhaden are used primarily for the production of meal, oil, and solubles. Small quantities are used for bait and canned pet food.

**NORTH ATLANTIC TRAWL FISH**. North Atlantic landings of butterfish, Atlantic cod, cusk, flounder (blackback, fluke, yellowtail and other), haddock, red and white hake, ocean perch, pollock and whiting (silver hake) were $239.1 million pounds valued at $172.3 million--a decrease of 28.9 million pounds (11 percent) in quantity and a decrease of $13.5 million (7 percent) in value compared with 1988. Of these species, flounders led in value, accounting for 52 percent of the total; followed by Atlantic cod, 28 percent; and pollock, 6 percent.

The 1989 landings of Atlantic cod were 78.4 million pounds valued at $47.8 million--an increase of 2.4 million pounds (3 percent) and $4.8 million (11 percent) in value compared with 1988. The exvessel price per pound was 61 cents per pound in 1989 compared with 56 cents per pound in 1988.

Landings of yellowtail flounder increased for the first time in six consecutive years to 12.3 million

pounds, an increase of 1.2 million pounds (11 percent) from 1988, but were still below the 5-year average.

Haddock landings continued to decline in 1989 to 3.8 million pounds (down 41 percent from 1988). Value decreased to $4.5 million (down 35 percent) from 1988.

The North Atlantic pollock landings were 23.2 million pounds in 1989 valued at $9.9 million, a decrease of 9.8 million pounds (30 percent) in quantity and $1.1 million (10 percent) in value compared with 1988.

**PACIFIC SALMON**. U.S. commercial landings of salmon were 785.9 million pounds valued at $591.2 million--an increase of 179.7 million pounds (30 percent) in quantity and a decrease of $319.4 million (35 percent) in value compared with 1988. Alaska accounted for 91 percent of the total landings; Washington, 7 percent; Oregon and California, 2 percent; landings of 406,000 pounds of silver salmon were taken from the Great Lakes. Red salmon landings were 274.1 million pounds valued at $346.4 million, an increase of 84.0 million pounds (44 percent) in quantity, but a decrease of $91.2 million (21 percent) in value compared with 1988. King salmon landings decreased to 31.5 million pounds--down 14.2 million pounds (31 percent) from 1988. Pink salmon landings of 367.9 million pounds in 1989 increased by 191.4 million pounds (108 percent); chum salmon, 68.7 million pounds, decreased 77.8 million pounds (53 percent); and silver salmon, 43.8 million pounds, decreased 3.7 million pounds (8 percent) compared with 1988.

Alaska landings of 713.0 million pounds valued at $506.7 million increased 186.6 million pounds (35 percent) in quantity and a decrease of $238.2 million (32 percent) in value compared with 1988. The distribution of Alaska salmon landings by species in 1989 was: sockeye, 261.7 million pounds (37 percent); pink, 351.2 million pounds (49 percent); chum, 58.8 million pounds (8 percent), coho, 30.9 million pounds (4 percent), and chinook, 10.5 million pounds (1 percent). The exvessel price per pound for all species in Alaska was 71 cents in 1989, down 70 cents from 1988.

Washington salmon landings were 55.3 million pounds valued at $56.9 million--an increase of 7.9 million pounds (17 percent) in quantity, but a decrease of $28.6 million (33 percent) in value compared with 1988. The biennial fishery for pink salmon went from 1,000 pounds in 1988 to 16.6 million pounds in 1989. Washington landings of red salmon were 12.4 million pounds--up 7.1 million pounds (134 percent), followed by chum, 9.9 million pounds (down 60 percent), silver, 8.4 million pounds (up 2 percent), and chinook, 8.0 million pounds (down 11 percent) compared with 1988. The average exvessel price per pound for all species in Washington decreased from $1.80 in 1988 to $1.03 in 1989.

Oregon salmon landings were 11.5 million pounds valued at $14.1 million--a decrease of 6.0 million pounds (34 percent) in quantity and $24.3 million (63 percent) in value compared with 1988. Landings of chinook salmon decreased to 7.6 million pounds (down 35 percent); silver, 3.8 million pounds (down 33 percent); pink, 20,000 pounds, unreported in 1988; and chum, 4,000 pounds (down 71 percent) compared with 1988. The average exvessel price per pound for all species in Oregon decreased from $2.20 in 1988 to $1.23 cents in 1989.

California salmon landings were 5.7 million pounds valued at $13.3 million--a decrease of 9.1 million pounds (62 percent) in quantity and $28.6 million (68 percent) compared with 1988. Chinook salmon landings were 5.4 million pounds valued at $12.9 million--a decrease of 9.0 million pounds (62 percent) in quantity and $28.3 million (69 percent) in value compared with 1988. Landings of silver salmon decreased to 229,000 pounds (down 28 percent) in quantity and $320,000 (down 45 percent) in value compared with 1988. The average exvessel price per pound paid to fishermen for all species in 1989 was $2.35 compared with $2.84 in 1988.

**SABLEFISH**. U.S. commercial landings of sablefish were 97.6 million pounds valued at $73.3 million--a decrease of 9.9 million pounds (9 percent) in quantity, and $18.5 million (20 percent) in value compared with 1988. Landings decreased in Alaska to 75.5 million pounds (down 9 percent) compared with 1988. Landings decreased in Washington to 5.6 million pounds (down 22 percent), and in California to 7.4 million pounds (down 11 percent) compared with 1988. The 1989 Oregon catch of 9.1 million pounds was the same as the 1988 catch. The average exvessel price per pound in 1989 was 75 cents compared with 85 cents in 1988.

**TUNA**. Landings of tuna by U.S. fishermen at ports in the 50 United States, Puerto Rico, American Samoa, other U.S. territories, and foreign ports were 541.5 million pounds valued at $309.0 million--a decrease of 67.9 million pounds (11 percent) in quantity and

$71.6 million (19 percent) in value compared with 1988. The average exvessel price per pound of all species of tuna in 1989 was 57 cents compared with 62 cents in 1988.

Bigeye landings were 4.5 million pounds--a decrease of 902,000 pounds (17 percent) compared with 1988. The average exvessel price per pound was $3.43 in 1989 compared with $2.78 in 1988.

Skipjack landings were 245.6 million pounds--a decrease of 54.4 million pounds (18 percent) compared with 1988. The average exvessel price per pound was 41 cents in 1989 compared with 50 cents in 1988.

Yellowfin landings were 273.7 million pounds --a decrease of 6.6 million pounds (2 percent) compared with 1988. The average exvessel price per pound was 58 cents in 1989 compared with 65 cents in 1988.

Bluefin landings were 4.7 million pounds--an increase of 1.0 million pounds (27 percent) compared with 1988. The average exvessel price per pound in 1989 was $4.82 compared with $4.62 in 1989.

**CLAMS**. Landings of all species yielded 138.2 million pounds of meats valued at $134.9 million--an increase of 6.4 million pounds (5 percent) in quantity and $162,000 (less than 1 percent) in value compared with 1988. The average exvessel price per pound decreased to 98 cents in 1989 from $1.02 in 1988.

Surf clams yielded 67.1 million pounds of meats valued at $30.7 million--an increase of 3.5 million pounds (6 percent) in quantity, and $1.5 million (5 percent) in value compared with 1988. New Jersey was the leading State with 42.9 million pounds (up 15 percent from 1988), followed by Virginia, 7.4 million pounds (down 31 percent); New York, 6.3 million pounds (up 119 percent); Maryland, 5.6 million pounds (down 20 percent); and Massachusetts, 3.4 million pounds (down 24 percent). The average exvessel price per pound of meats was 46 cents in 1989, the same as 1988.

The ocean quahog fishery produced 51.0 million pounds of meats valued at $16.4 million--an increase of 4.7 million pounds (10 percent) in quantity, and $1.5 million (10 percent) in value compared with 1988. New Jersey was the leading producer with 27.0 million pounds of meats accounting for 53 percent of the total ocean quahog landings. The value for New Jersey in 1989 was $7.8 million--an increase of $2.8 million (56 percent) compared with 1988. The average exvessel price per pound of meats was 32 cents in 1989, the same as 1988.

The hard clam fishery produced 9.3 million pounds of meats valued at $44.9 million--a decrease of 3.1 million pounds (25 percent) in quantity and $22.9 million (34 percent) in value compared with 1988. Landings in the New England region were 3.6 million pounds of meats (down 14 percent); Middle Atlantic region, 1.2 million pounds (down 71 percent); Chesapeake region, 1.5 million pounds (up 17 percent); and the South Atlantic region, 1.8 million pounds (up 15 percent). The average exvessel price per pound of meats decreased from $5.48 in 1988 to $4.84 in 1989.

Soft clams yielded 6.8 million pounds of meats valued at $19.9 million--an increase of 15,000 pounds (less than 1 percent) in quantity, and $1.1 million (6 percent) in value compared with 1988. Maryland was the leading State with 2.9 million pounds of meats (down 6 percent from 1988), followed by Maine with 2.5 million pounds (up 9 percent) and Massachusetts with 1.1 million pounds (down 12 percent). The average exvessel price per pound of meats was $4.84 in 1989 compared with $5.48 in 1988.

**CRABS**. Landings of all species of crabs were 458.4 million pounds valued at $414.4 million--an increase of 2.7 million pounds (1 percent) in quantity and $30.8 million (8 percent) in value compared with 1988.

Hard blue crab landings were 206.7 million pounds valued at $81.0 million--a decrease of 11.9 million pounds (5 percent) in quantity and $3.4 million (4 percent) in value compared with 1988. Hard blue crab landings in the Chesapeake region of 89.0 million pounds increased 10.1 million pounds (13 percent), and the South Atlantic region landings of 52.3 million pounds decreased by 1.9 million pounds (4 percent). The Gulf region, with 55.2 million pounds, decreased 22.6 million pounds (29 percent). The Middle Atlantic region landings of 11.5 million pounds valued at $5.4 million increased 2.4 million pounds (27 percent) in quantity and $1.0 million (25 percent) in value compared with 1988. The average exvessel price per pound of hard blue crabs was 39 cents in 1989, the same as 1988.

Dungeness crab landings were 41.0 million pounds valued at $45.5 million--a decrease of 6.5 million pounds (14 percent) in quantity and $9.2 million (17 percent) in value compared with 1988. Washington landings of 20.0 million pounds led all

states with 49 percent of the total landings an increase of 1.9 million pounds (11 percent) compared with 1988. Alaska decreased in landings with 7.5 million pounds, down 27 percent compared with 1988. Oregon landings were 11.7 million pounds, up 24 percent compared with 1988. California decreased in landings with 1.8 million pounds (down 81 percent from 1988). The average exvessel price per pound was $1.11 in 1989 compared with $1.15 in 1988.

U.S. landings of king crab were 26.4 million pounds valued at $106.2 million--an increase of 5.4 million pounds (26 percent) compared with 1988. The average exvessel price per pound in 1989 was $4.02 compared with $4.01 in 1988.

Snow (tanner) crab landings were 164.6 million pounds valued at $160.1 million--an increase of 18.3 million pounds (13 percent) in quantity and $23.0 million (17 percent) in value compared with 1988. The average exvessel price per pound was 97 cents in 1989, up from 94 cents in 1988.

**LOBSTER, AMERICAN**. American lobster landings were 52.9 million pounds valued at $149.1 million--an increase in quantity of 4.3 million pounds in quantity (9 percent) and an increase in value of $3.9 million in value (3 percent) compared with 1988. Maine led in landings for the eighth consecutiveyear with 23.3 million pounds valued at $59.2 million -- up 1.5 million pounds (7 percent) from 1988. Massachusetts, the second leading producer, had landings of 16.2 million pounds valued at $48.5 million, an increase of 719,000 pounds (5 percent) compared with 1988. These two states combined to produce 74 percent of the total national landings. The average exvessel price per pound was $2.82 in 1989 compared with $2.99 in 1988.

**LOBSTERS, SPINY**. U.S. landings of spiny lobster were 8.1 million pounds valued at $26.4 million--an increase of 959,000 pounds (13 percent) in quantity and $3.4 million (15 percent) in value compared with 1988. Florida, with landings of 6.5 million pounds valued at $18.7 million, accounted for 80 percent of the total catch and 71 percent of the value. This was an increase of 1.1 million pounds (20 percent) in quantity and $3.2 million (21 percent) in value compared with 1988. Overall the average exvessel price per pound was $3.26 in 1989 compared with $3.21 in 1988.

**OYSTERS**. U.S. oyster landings yielded 29.9 million pounds of meats valued at $83.6 million--a decrease of 2.0 million pounds (6 percent) in quantity, but an increase of $5.1 million (6 percent) in value compared with 1988. The Gulf region (principally Louisiana with 77 percent of the region's total volume) led in production with 14.8 million pounds of meats, 50 percent of the national total; followed by the Pacific region with 7.9 million pounds (26 percent), and the Chesapeake region, with 4.1 million pounds (14 percent). The average exvessel price per pound of meats was $2.79 in 1989 compared with $2.46 in 1988.

**SHRIMP**. U.S. landings of shrimp were 351.5 million pounds valued at $467.6 million--an increase of 20.6 million pounds (6 percent) in quantity, but a decrease of $38.5 million (8 percent) in value compared with 1988. Shrimp landings increased in all areas: New England (up 17 percent), the South Atlantic (up 39 percent), the Gulf coast (up 1 percent), and the Pacific (up 10 percent), when compared with 1988. The average exvessel price per pound of shrimp decreased to $1.33 in 1989 compared with $1.53 in 1988. Gulf region landings were 228.4 million pounds compared with 225.8 million pounds in 1988. Louisiana led all Gulf states with 100.8 million pounds (down 2 percent), followed by Texas, 79.0 million pounds (up 1 percent); Florida (west coast), 16.2 million pounds (up 2 percent); Mississippi, 15.7 million pounds (up 9 percent); and Alabama, 16.7 million pounds (up 17 percent). Oregon was the third leading State nationwide with landings of 49.1 million pounds (up 17 percent), and Washington landings were 16.0 million pounds, down 13 percent compared with 1988.

**SCALLOPS**. U.S. landings of all species of scallops were 40.6 million pounds of meats valued at $140.2 million--a decrease of 2.4 million pounds (6 percent) in quantity, and $3.9 million (3 percent) in value compared with 1988. The average exvessel price per pound of meats increased from $3.35 in 1988 to $3.45 in 1989.

Bay scallop landings were 274,000 pounds of meats valued at $1.7 million--a decrease of 295,000 pounds (52 percent) in quantity, $1.7 million (51 percent) in value compared with 1988. Massachusetts was the leading state with 215,000 pounds of meats, 78 percent of the national total. The average exvessel price per pound of meats was $6.12 in 1989 compared with $6.00 in 1988.

Sea scallop landings were 33.8 million pounds of meats valued at $132.6 million--an increase of 3.2 million pounds (10 percent) in quantity and $4.4 million (3 percent) in value compared with 1988.

# REVIEW

## IMPORTANT SPECIES

Massachusetts was the leading state in landings of sea scallops with 18.3 million pounds of meats, 54 percent of the national total. The average exvessel price per pound of meats in 1989 was $3.93 compared with $4.20 in 1988.

Landings of calico scallops were 6.6 million pounds of meats valued at $5.9 million--a decrease of 5.3 million pounds (45 percent) in quantity and $6.5 million (52 percent) in value compared with 1988. Florida (east coast) had 48 percent of the total landings in 1989. The average exvessel price per pound of meats was 90 cents in 1989 compared with $1.05 in 1988.

**SQUID**. U.S. commercial landings of squid were 127.3 million pounds valued at $31.1 million--an increase of 173,000 pounds (less than 1 percent) and $7.2 million (30 percent) compared with 1988. California was the leading state with 60.4 million pounds, 47 percent of the national total.

The New England region landings were 47.5 million pounds (up 97 percent from 1988). Landings in the Middle Atlantic region were 17.5 million pounds (up 1 percent), and the Chesapeake Region, 1.8 million pounds (up 590 percent). The average exvessel price per pound for squid was 24 cents in 1989, compared with 19 cents in 1988.

## PER CAPITA CONSUMPTION

**PER CAPITA CONSUMPTION**. U.S. per capita consumption of fish and shellfish was 15.9 pounds (edible meat) in 1989. This total was 0.7 pounds more than 15.2 pounds consumed per capita in 1988.

Per capita consumption of fresh and frozen products was 10.5 pounds, an increase of 0.3 pounds from the 1988 level. Fresh and frozen finfish consumption was 7.1 pounds per capita in 1989, while fresh and frozen shellfish consumption was 3.4 pounds per capita. The fresh and frozen finfish consumption includes approximately 0.7 pounds per capita from domestic farm-raised catfish, 0.1 pound more than in 1988.

Consumption of canned fishery products was 5.1 pounds per capita in 1989, 0.4 pounds more than in 1988.

**PER CAPITA USE**. The per capita use of all fishery products (edible and industrial) in 1989 was 62.2 pounds (round weight) -- up 2.8 pounds compared with 1988.

# REVIEW

## PROCESSED FISHERY PRODUCTS

### FRESH AND FROZEN

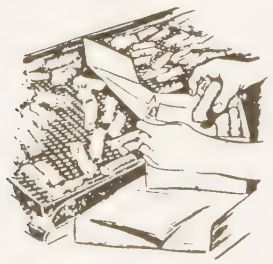
**FISH FILLETS AND STEAKS**. In 1989 the U.S. production of raw (uncooked) fish fillets and steaks, including blocks, was 389.6 million pounds--11.4 million pounds more than the 378.2 million pounds in 1988. These fillets and steaks were valued at $737.0 million--$29.9 million less than 1988. Alaska pollock fillets and blocks led all species with 131.3 million pounds--34 percent of the total. Production of groundfish fillets and steaks (cod, cusk, haddock, hake, Atlantic ocean perch, and Atlantic pollock) was 95.9 million pounds compared with 88.2 million in 1988.

**FISH STICKS AND PORTIONS**. The combined production of fish sticks and portions was 368.9 million pounds valued at $516.7 million compared with the 1988 production of 381.4 million pounds valued at $552.7 million--a decrease of 12.5 million pounds and $36.0 million.

The total production of fish sticks amounted to 89.1 million pounds valued at $116.4 million, an increase of 9.0 million pounds and $2.6 million compared with 1988. The total production of fish portions amounted to 279.8 million pounds valued at $400.3 million--a decrease of 21.5 million pounds in quantity and $38.6 million compared with 1988.

**BREADED SHRIMP**. The production of breaded shrimp in 1989 was a record 121.0 million pounds valued at $404.6 million, compared with the 1988 production of 99.5 million pounds valued at $292.9 million.

**FROZEN FISHERY TRADE**. In 1989, stocks of frozen fishery products in cold storage were at a low of 329.2 million pounds on April 30 and a high of 444.9 million pounds on September 30. Cold storage holdings of shrimp products were at a high of 57.4 million pounds on October 31 and a low of 44.3 million pounds on May 31. Saltwater fillets and steaks holdings reached a high of 116.4 million pounds on December 31 and were at a low of 64.2 million pounds on March 31. Holdings of blocks and slabs were at a high of 63.5 million pounds on August 31 and at a low of 46.6 million pounds on April 30. King crab holdings were 3.4 million pounds on December 31, but reached a low of 1.4 million pounds on June 30, 1989. Cold storage holdings showed an increase for eight months of 1989 when compared with 1988.



# REVIEW

## PROCESSED FISHERY PRODUCTS

### CANNED FISHERY PRODUCTS

**CANNED FISHERY PRODUCTS**. The pack of canned fishery products in the 50 states, American Samoa, and Puerto Rico was 54.7 million standard cases (1.5 billion pounds) valued at $2.0 billion--an increase of 9.4 million standard cases (324.0 million pounds), and $511.1 million compared with the 1988 pack. The 1989 pack included 47.5 million cases (1.1 billion pounds) valued at $1.8 billion for human consumption, and 7.2 million standard cases (345.5 million pounds) valued at $238.3 million for bait and animal food.

**CANNED SALMON**. The 1989 U.S. pack of natural Pacific salmon was 4.1 million standard cases (197.0 million pounds) valued at $513.6 million, compared with 1.8 million standard cases (88.4 million pounds) valued at $219.4 million packed in 1988. Alaskan plants accounted for 94 percent in quantity and 95 percent in value of the salmon pack.

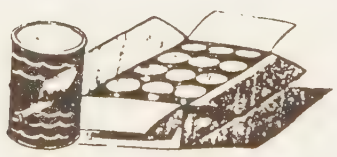
**CANNED SARDINES**. The pack of Maine sardines (sea herring) was 564,989 standard cases (13.2 million pounds) valued at $16.8 million, a decrease of 231,192 standard cases (5.4 million pounds) and $7.3 million compared with 1988. An additional 206,185 standard cases (4.8 million pounds) of herring valued at $7.2 million were packed in 1989 -- 21,572 standard cases (505 thousands pounds) and $1.2 million more than the 1988 pack.

**CANNED TUNA**. The U.S. pack of tuna was 35.2 million standard cases (686.3 million pounds) valued at $1.1 billion--an increase of 4.5 million standard cases (88.1 million pounds) in quantity, and $97.6 million in value compared with the 1988 pack. The pack of albacore tuna was 7.0 million standard cases--316,000 standard cases more than the 6.7 million standard cases produced in 1988. Albacore tuna was 20 percent of the tuna pack in 1989. Lightmeat tuna (bigeye, bluefin, skipjack, and yellowfin) comprised the remainder with a pack of 28.2 million standard cases--4.2 million standard cases more than the 24.0 million standard cases packed in 1988.

**CANNED CLAMS**. The U.S. pack of clams (whole, minced, chowder, and juice) was 5.3 million standard cases (123.6 million pounds) valued at $82.1 million, an increase of 440,223 standard cases (5.3 million pounds) in quantity but a decrease of $8.6 million more in value than the pack in 1988. The pack of whole and minced clams of 2.4 million standard cases (529,886 standard cases more than the 1988 pack) accounted for 45 percent of the total clam pack. Clam chowder and clam juice (2.9 million standard cases) made up the majority of the remaining pack.

**CANNED SHRIMP**. The U.S. pack of natural shrimp was 338,610 standard cases (2.6 million pounds) valued at $8.8 million--a decrease of 274,522 standard cases (1.9 million pounds) and $16.2 million compared with the 1988 pack.

**OTHER CANNED ITEMS**. The pack of pet food was 7.2 million standard cases valued at $237.8 million--an increase of 2.6 million standard cases compared with the pack in 1988.



# REVIEW

## PROCESSED FISHERY PRODUCTS

### INDUSTRIAL FISHERY PRODUCTS

**INDUSTRIAL FISHERY PRODUCTS**. The value of the domestic production of industrial fishery products was $206.1 million--a decrease of $29.5 million compared with the 1988 value of $235.6 million. The leading state was Louisiana ($68.7 million) which accounted for 33 percent of the total U.S. value for 1989.

**FISH MEAL AND SCRAP**. The domestic production of fish meal and scrap (including shellfish) was 618.4 million pounds valued at $115.0 million--a decrease of 25.4 million pounds from the 1988 volume and $15.6 million in value. Menhaden meal production was 463.9 million pounds valued at $89.1 million--a decrease of 40.6 million pounds and $24.9 million compared with 1988. Menhaden accounted for 75 percent of the 1989 production of fish meal and scrap. Shellfish meal production was 25.4 million pounds--an increase of 6.6 million pounds from the 1988 level. Tuna and mackerel meal production was 82.3 million pounds--an increase of 6.3 million pounds from 1988. Production of unclassified meal (consisting mainly of alewives, anchovy, carp, sea herring, and unclassified fish) was 46.8 million pounds--an increase of 2.3 million pounds compared with 1988.

**FISH SOLUBLES**. Domestic production of fish solubles was 232.7 million pounds, 9.3 million pounds more than the 1988 production.

**FISH OILS**. The domestic production of fish oils was 225.5 million pounds valued at $23.5 million--an increase of 753,000 pounds but a decrease of $20.1 million in value compared with 1988 production. The production of menhaden oil was 218.6 million pounds valued at $23.2 million--an increase of 1.1 million pounds but $19.6 million less in value compared with 1988. Menhaden oil accounted for 97 percent of the volume and 98 percent of the value of the total 1989 fish oil production. Unclassified oil production decreased by 304,000 pounds.

**OTHER INDUSTRIAL PRODUCTS**. Oyster shell products, together with agar-agar, animal feeds, crab and clam shells processed for food serving, fish pellets, Irish moss extracts, kelp products, dry and liquid fertilizers, pearl essence, shark leathers, and mussel shell buttons were valued at $49.8 million, compared with $46.7 million in 1988--an increase of $3.0 million.

## FOREIGN TRADE IN FISHERY PRODUCTS

**IMPORTS**. U.S. imports of edible fishery products in 1989 were valued at $5.5 billion, $56.2 million more than in 1988. The quantity of edible imports was a record 3.2 billion pounds, 275.2 million pounds higher than the quantity imported in 1988.

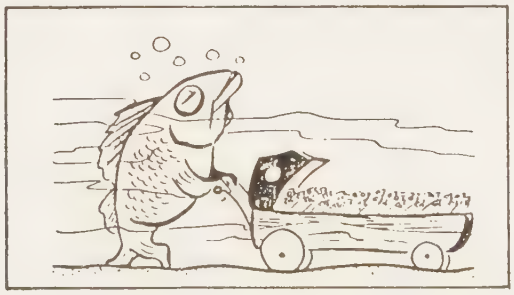
The quantity of shrimp imported in 1989 was 503.0 million pounds, 914,000 pounds less than the previous record quantity imported in 1988. Valued at $1.7 billion, $49.5 million less than the 1988 value, shrimp imports accounted for 31 percent of the value of total edible imports. Imports of fresh and frozen tuna were 649.7 million pounds, 99.6 million pounds more than the 550.1 million pounds imported in 1988. Imports of canned tuna-not in oil were 347.8 million pounds, 103.6 million pounds more than the 244.2 million pounds imported in 1988. Imports of fresh and frozen fillets and steaks amounted to 517.6 million pounds, a decrease of 91,000 pounds from 1988. Regular and minced block imports were 283.3 million pounds, a decline of 20.0 million pounds from 1988. Edible imports consisted of 2.6 billion pounds of fresh and frozen products valued at $4.7 billion, 532.1 million pounds of canned products valued at $639.2 million, 65.8 million pounds of cured products valued at $97.2 million, 2.1 million pounds of caviar and roe products valued at $14.4 million, and 15.6 million pounds of other products valued at $26.1 million.

Imports of nonedible fishery products were valued at a record $4.1 billion, $676.1 million more than the $3.4 billion imported in 1988. Total value of edible and nonedible products resulted in a record import value of $9.6 billion in 1989, $732.4 million more than the previous record in 1988, when $8.9 billion of fishery products were imported.

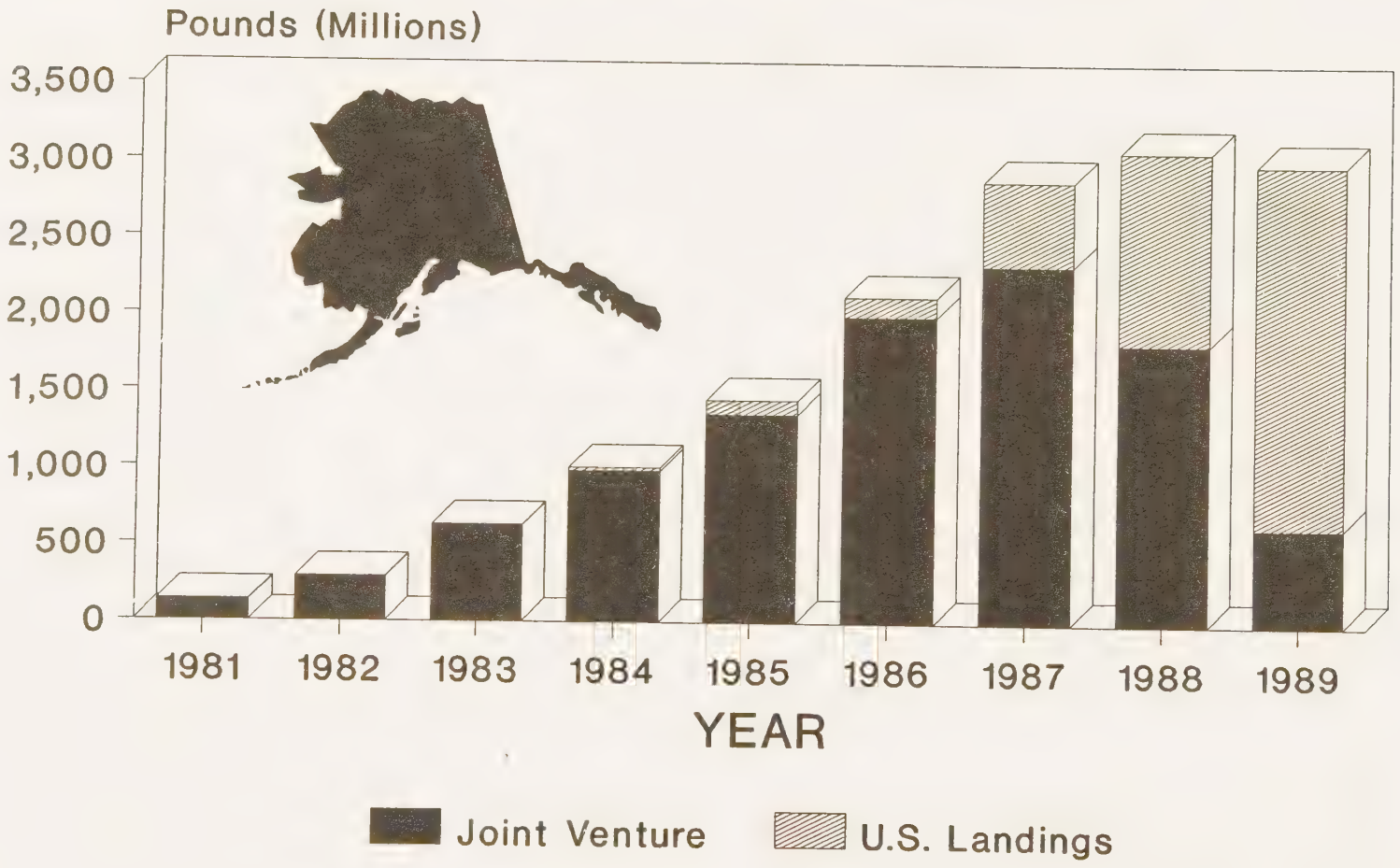
**EXPORTS**. U.S. exports of edible fishery products of domestic origin were a record 1.4 billion pounds valued at a record $2.3 billion, compared with 1.1 billion pounds at $2.2 billion exported in 1988. The $112.2 million received for U.S.-flag vessel catches transferred onto foreign vessels in the U.S. Exclusive Economic Zone joint venture operations are not included in the export statistics.

Fresh and frozen items were 1.1 billion pounds valued at $1.8 billion, an increase of 197.5 million pounds and $17.4 million compared with 1988. Fresh and frozen exports consisted principally of 337.4 million pounds of salmon valued at $747.3 million and 81.7 million pounds of crabs valued at $246.3 million. Canned items were 136.5 million pounds valued at $211.2 million. Salmon was the major canned item exported, with 40.4 million pounds valued at $89.7 million. Cured items were 26.7 million pounds valued at $31.6 million. Caviar and roe exports were 72.8 million pounds valued at $195.0 million, an increase of 27.9 million pounds and $50.3 million compared with 1988.

Exports of nonedible products were valued at a record $2.4 billion compared with $199.0 million in 1988. The dramatic increase of nonedible fishery products is due to the change in the new schedule B exports codes in 1989 (see page 54).Exports of fishmeal amounted to 103.8 million pounds valued at $23.8 million. The total value of edible and nonedible exports was $4.7 billion.



# U.S. COMMERCIAL CATCH OF ALASKAN POLLOCK



# U.S. COMMERCIAL LANDINGS

## U.S. DOMESTIC LANDINGS, BY SPECIES, 1988 AND 1989 (1)

| Species | 1988 | | 1989 | | Aver. (1984-88) |
|---|---|---|---|---|---|
| Fish | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds |
| Alewives: | | | | | |
| Atlantic and Gulf. | 5,645 | 625 | 4,169 | 508 | 9,218 |
| Great Lakes..... | 10,705 | 191 | 10,030 | 173 | 18,770 |
| Anchovies..... | 12,425 | 2,615 | 13,389 | 2,696 | 14,216 |
| Bluefish..... | 16,853 | 3,012 | 10,429 | 2,245 | 14,501 |
| Bonito..... | 9,210 | 1,827 | 2,676 | 582 | 6,686 |
| Butterfish..... | 5,441 | 3,407 | 7,077 | 4,116 | 12,400 |
| Cod: | | | | | |
| Atlantic..... | 76,073 | 42,941 | 78,423 | 47,772 | 75,181 |
| Pacific..... | 267,205 | 38,429 | 372,137 | 55,375 | 155,628 |
| Croaker..... | 10,604 | 4,596 | 8,287 | 4,114 | 11,138 |
| Cusk..... | 2,363 | 1,021 | 2,058 | 974 | 3,745 |
| Flounders: | | | | | |
| Atlantic and Gulf: | | | | | |
| Blackback..... | 18,103 | 21,533 | 14,655 | 19,609 | 21,863 |
| Fluke..... | 36,011 | 44,345 | 21,840 | 33,447 | 34,336 |
| Yellowtail..... | 11,114 | 13,187 | 12,294 | 13,911 | 22,908 |
| Other..... | 25,608 | 27,022 | 20,206 | 22,712 | 35,299 |
| Pacific..... | 137,784 | 34,055 | 133,494 | 30,152 | 88,213 |
| *Total.....* | *228,620* | *140,142* | *202,489* | *119,831* | *202,619* |
| Groupers..... | 12,228 | 21,703 | 15,149 | 25,588 | 11,547 |
| Haddock..... | 6,429 | 7,030 | 3,808 | 4,538 | 12,897 |
| Hake: | | | | | |
| Pacific (whiting). | 15,740 | 1,160 | 16,564 | 1,094 | 22,244 |
| Red..... | 3,834 | 618 | 3,436 | 591 | 4,386 |
| White..... | 12,006 | 3,639 | 11,286 | 4,423 | 14,250 |
| Halibut..... | 81,608 | 72,718 | 75,168 | 85,145 | 68,866 |
| Herring, sea: | | | | | |
| Atlantic..... | 90,397 | 5,229 | 89,657 | 5,041 | 77,046 |
| Pacific..... | 131,432 | 57,431 | 119,346 | 24,391 | 126,322 |
| Jack mackerel..... | 22,546 | 1,685 | 28,422 | 1,927 | 23,418 |
| Lingcod..... | 6,536 | 2,385 | 8,003 | 2,785 | 7,511 |
| Mackerel: | | | | | |
| Atlantic..... | 14,753 | 1,962 | 17,913 | 3,182 | 9,481 |
| King..... | 4,308 | 5,043 | 3,772 | 4,287 | 4,999 |
| Pacific..... | 100,342 | 7,498 | 88,667 | 6,023 | 89,680 |
| Spanish..... | 4,237 | 1,479 | 6,759 | 3,037 | 5,503 |
| Menhaden: | | | | | |
| Atlantic..... | 677,928 | 32,445 | 702,688 | 32,129 | 694,197 |
| Gulf..... | 1,408,140 | 73,259 | 1,286,038 | 52,333 | 1,869,841 |
| *Total.....* | *2,086,068* | *105,704* | *1,988,726* | *84,462* | *2,564,039* |
| Mullets..... | 32,642 | 11,218 | 31,594 | 15,023 | 25,680 |
| Ocean perch: | | | | | |
| Atlantic..... | 2,350 | 1,467 | 1,392 | 919 | 7,025 |
| Pacific..... | 11,919 | 2,546 | 22,332 | 4,646 | 12,918 |
| Pollock: | | | | | |
| Atlantic..... | 33,052 | 11,071 | 23,249 | 9,922 | 43,236 |
| Alaska..... | 1,257,251 | 95,252 | 2,361,988 | 186,921 | 411,314 |
| Rockfishes..... | 124,026 | 38,663 | 133,623 | 42,338 | 100,323 |
| Sablefish..... | 107,511 | 91,779 | 97,590 | 73,272 | 81,698 |
| Salmon, Pacific: | | | | | |
| Chinook or king... | 45,672 | 117,551 | 31,466 | 48,531 | 33,071 |
| Chum or keta..... | 146,467 | 134,689 | 68,685 | 30,078 | 105,017 |
| Pink..... | 176,487 | 127,297 | 367,898 | 132,784 | 241,839 |
| Red or sockeye.... | 190,036 | 437,630 | 274,051 | 346,442 | 219,080 |
| Silver or coho.... | 47,486 | 93,506 | 43,768 | 33,399 | 50,001 |
| *Total.....* | *606,148* | *910,673* | *785,868* | *591,234* | *649,008* |
| Scup or porgy..... | 14,358 | 9,572 | 9,582 | 7,720 | 15,867 |
| Sea bass: | | | | | |
| Black..... | 4,824 | 5,144 | 3,854 | 4,528 | 4,690 |
| White..... | 107 | 218 | 94 | 202 | 112 |
| Sea trout: | | | | | |
| Gray..... | 20,533 | 7,948 | 14,187 | 7,160 | 19,038 |
| Spotted..... | 3,094 | 3,169 | 3,438 | 3,386 | 3,127 |
| White..... | 371 | 229 | 299 | 136 | 505 |
| Sharks: | | | | | |
| Dogfish..... | 10,070 | 975 | 12,804 | 1,602 | 10,597 |
| Other..... | 14,598 | 8,454 | 17,174 | 9,364 | 7,782 |

See notes at end of table.

(Continued)

# U.S. COMMERCIAL LANDINGS

## U.S. DOMESTIC LANDINGS, BY SPECIES, 1988 AND 1989 (1) - Continued

| Species | 1988 | | 1989 | | Aver. (1984-88) |
|---|---|---|---|---|---|
| Fish - Continued: | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds |
| Snapper: | | | | | |
| Red | 4,154 | 9,496 | 3,959 | 10,329 | 4,661 |
| Other | 6,796 | 11,319 | 6,755 | 12,332 | 4,831 |
| Striped bass | 407 | 517 | 285 | 477 | 1,014 |
| Swordfish | 12,818 | 42,703 | 11,768 | 38,321 | 11,468 |
| Tilefish | 4,555 | 7,222 | 2,542 | 4,246 | 5,995 |
| Tuna: | | | | | |
| Albacore | 12,303 | 10,598 | 5,591 | 4,279 | 15,874 |
| Bigeye | 4,150 | 14,421 | 4,547 | 15,587 | 2,201 |
| Bluefin | 3,745 | 17,305 | 4,749 | 22,893 | 8,302 |
| Skipjack | 24,395 | 13,796 | 14,042 | 7,701 | 29,505 |
| Yellowfin | 65,975 | 64,324 | 59,678 | 52,294 | 63,580 |
| Unclassified | 781 | 546 | 806 | 789 | 1,159 |
| ***Total*** | ***111,349*** | ***120,990*** | ***89,413*** | ***103,543*** | ***120,620*** |
| Whiting | 35,569 | 8,621 | 39,353 | 9,403 | 40,185 |
| Other marine finfishes | 220,194 | 71,360 | 256,973 | 75,286 | - |
| Other freshwater finfishes | 29,257 | 18,534 | 27,198 | 19,037 | - |
| ***Total, fish*** | ***5,905,561*** | ***2,023,230*** | ***7,145,154*** | ***1,726,247*** | - |
| Shellfish et al. | | | | | |
| Clams: | | | | | |
| Hard | 12,371 | 67,818 | 9,278 | 44,925 | 13,406 |
| Ocean quahog | 46,310 | 14,921 | 51,025 | 16,386 | 46,545 |
| Soft | 6,814 | 18,717 | 6,829 | 19,854 | 7,191 |
| Surf | 63,545 | 29,183 | 67,072 | 30,718 | 69,160 |
| Other | 2,700 | 4,142 | 3,962 | 23,060 | 2,691 |
| ***Total*** | ***131,740*** | ***134,781*** | ***138,166*** | ***134,943*** | ***138,992*** |
| Crabs: | | | | | |
| Blue, hard | 218,663 | 84,357 | 206,720 | 80,989 | 198,612 |
| Dungeness | 47,440 | 54,771 | 40,984 | 45,534 | 30,510 |
| King | 20,973 | 84,153 | 26,391 | 106,204 | 21,703 |
| Snow (tanner) | 146,326 | 137,052 | 164,643 | 160,082 | 100,929 |
| Other | 22,227 | 23,227 | 19,640 | 21,592 | 17,895 |
| ***Total*** | ***455,629*** | ***383,560*** | ***458,378*** | ***414,401*** | ***369,648*** |
| Lobsters: | | | | | |
| American | 48,643 | 145,236 | 52,926 | 149,115 | 46,075 |
| Spiny | 7,166 | 23,030 | 8,125 | 26,447 | 6,262 |
| Oysters | 31,892 | 78,498 | 29,926 | 83,585 | 40,941 |
| Scallops | | | | | |
| Bay | 569 | 3,414 | 274 | 1,678 | 989 |
| Calico | 11,868 | 12,462 | 6,580 | 5,928 | 14,696 |
| Sea | 30,557 | 128,243 | 33,757 | 132,594 | 23,369 |
| Shrimp: | | | | | |
| New England | 6,786 | 7,497 | 7,950 | 7,808 | 8,911 |
| South Atlantic | 24,244 | 51,667 | 33,703 | 53,561 | 23,484 |
| Gulf | 225,789 | 414,469 | 228,368 | 374,013 | 260,830 |
| Pacific | 74,054 | 32,401 | 81,493 | 32,189 | 52,613 |
| Other | - | - | - | - | 92 |
| ***Total*** | ***330,873*** | ***506,034*** | ***351,514*** | ***467,571*** | ***345,929*** |
| Squid: | | | | | |
| Atlantic | 46,739 | 16,220 | 66,829 | 25,592 | 35,260 |
| Pacific | 80,426 | 7,689 | 60,509 | 5,509 | 38,070 |
| Other shellfish | 110,890 | 57,862 | 110,942 | 64,830 | - |
| ***Total, shellfish et al.*** | ***1,286,992*** | ***1,497,029*** | ***1,317,926*** | ***1,512,193*** | - |
| ***Grand total*** | ***7,192,553*** | ***3,520,259*** | ***8,463,080*** | ***3,238,440*** | - |

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage area States are not available for 1988 and 1989.

Note:--Data are preliminary. Data do not include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, or catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. EEZ (joint ventures). Therefore, they will not agree with "U.S. Commercial Landings" table on page 6. Data do not include aquaculture products, except oysters and clams.

# U.S. COMMERCIAL LANDINGS

## DISPOSITION OF U.S. DOMESTIC LANDINGS, 1988 AND 1989

| End Use | 1988 | | 1989 | |
|---|---|---|---|---|
| | Million pounds | Percent | Million pounds | Percent |
| Fresh and frozen: | | | | |
| For human food..... | 3,605 | 50.1 | 5,010 | 59.2 |
| For bait and animal food..... | 208 | 2.9 | 199 | 2.4 |
| ***Total.....*** | ***3,813*** | ***53.0*** | ***5,209*** | ***61.6*** |
| Canned: | | | | |
| For human food..... | 897 | 12.5 | 1,136 | 13.4 |
| For bait and animal food..... | 120 | 1.7 | 108 | 1.3 |
| ***Total.....*** | ***1,017*** | ***14.1*** | ***1,244*** | ***14.7*** |
| Cured for human food.... | 86 | 1.2 | 58 | 0.7 |
| Reduction to meal, oil, etc..... | 2,276 | 31.6 | 1,952 | 23.1 |
| ***Grand total.....*** | ***7,192*** | ***100.0*** | ***8,463*** | ***100.0*** |

NOTE:--Data are preliminary. Table may not add to rounding.

## DISPOSITION OF U.S. DOMESTIC LANDINGS, BY MONTH, 1989

| Month | Landings for Human food | | Landings for Industrial purposes (1) | | Total | |
|---|---|---|---|---|---|---|
| | Million pounds | Percent | Million pounds | Percent | Million pounds | Percent |
| January..... | 414 | 6.7 | 30 | 1.3 | 444 | 5.2 |
| February..... | 441 | 7.1 | 19 | 0.8 | 460 | 5.4 |
| March..... | 538 | 8.7 | 21 | 0.9 | 559 | 6.6 |
| April..... | 525 | 8.5 | 147 | 6.5 | 672 | 7.9 |
| May..... | 448 | 7.2 | 205 | 9.1 | 653 | 7.7 |
| June..... | 532 | 8.6 | 244 | 10.8 | 776 | 9.2 |
| July..... | 767 | 12.4 | 367 | 16.2 | 1,134 | 13.4 |
| August..... | 744 | 12.0 | 561 | 24.8 | 1,305 | 15.4 |
| September..... | 588 | 9.5 | 367 | 16.2 | 955 | 11.3 |
| October..... | 445 | 7.2 | 171 | 7.6 | 616 | 7.3 |
| November..... | 407 | 6.6 | 57 | 2.5 | 464 | 5.5 |
| December..... | 355 | 5.7 | 70 | 3.1 | 425 | 5.0 |
| ***Total.....*** | ***6,204*** | ***100.0*** | ***2,259*** | ***100.0*** | ***8,463*** | ***100.0*** |

(1) Processed into meal, oil, solubles, and shell products, and used as bait and animal food.

## U.S. COMMERCIAL LANDINGS OF FISH AND SHELLFISH, 1980-1989 (1)

| Year | Landings for Human Food | | Landings for Industrial Purposes (2) | | Total | |
|---|---|---|---|---|---|---|
| | Million pounds | Million dollars | Millions pounds | Million dollars | Millions pounds | Million dollars |
| 1980..... | 3,654 | 2,092 | 2,828 | 145 | 6,482 | 2,237 |
| 1981..... | 3,547 | 2,277 | 2,430 | 111 | 5,977 | 2,388 |
| 1982..... | 3,285 | 2,247 | 3,082 | 143 | 6,367 | 2,390 |
| 1983..... | 3,238 | 2,203 | *3,201 | 152 | 6,439 | 2,355 |
| 1984..... | 3,320 | 2,206 | 3,118 | 144 | 6,438 | 2,350 |
| 1985..... | 3,294 | 2,198 | 2,964 | 128 | 6,258 | 2,326 |
| 1986..... | 3,393 | 2,641 | 2,638 | 122 | 6,031 | 2,763 |
| 1987..... | 3,946 | 2,979 | 2,950 | 136 | 6,896 | 3,115 |
| 1988..... | 4,588 | 3,362 | 2,604 | 158 | 7,192 | 3,520 |
| 1989..... | *6,204 | 3,111 | 2,259 | 127 | *8,463 | 3,238 |

(1) Statistics on landings are shown in round weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are shown in weight of meats (excluding the shell). All data are preliminary. (2) Processed into meal, oil, solubles, and shell products, or used as bait or animal food.

*Record

NOTE:--Data do not include landings outside the 50 States or products of aquaculture, except oysters and clams.

# U.S. COMMERCIAL LANDINGS

## U.S. DOMESTIC LANDINGS, BY STATES, 1988 AND 1989 (1)

| States | 1988 | | 1989 | | Record Landings | |
|---|---|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Year | Thousand pounds |
| Alabama | 22,296 | 39,709 | 25,444 | 38,293 | 1973 | 39,749 |
| Alaska | 2,639,250 | 1,339,424 | 4,088,780 | 1,223,230 | 1989 | 4,094,537 |
| California | 495,577 | 199,316 | 418,409 | 123,304 | 1936 | 1,760,193 |
| Connecticut | 9,133 | 17,444 | 8,588 | 18,309 | 1930 | 88,012 |
| Delaware | 5,536 | 3,161 | 6,898 | 3,453 | 1953 | 367,500 |
| Florida | 182,220 | 169,639 | 197,462 | 185,858 | 1938 | 241,443 |
| Georgia | 16,609 | 21,480 | 15,770 | 19,791 | 1927 | 47,607 |
| Hawaii | 21,131 | 39,749 | 24,397 | 47,109 | 1984 | 34,824 |
| Illinois | 268 | 330 | 238 | 304 | - | (2) |
| Indiana | 1,301 | 1,677 | 1,528 | 1,929 | - | (2) |
| Louisiana | 1,356,466 | 317,297 | 1,227,941 | 264,153 | 1984 | 1,931,027 |
| Maine | 157,281 | 123,933 | 151,119 | 132,522 | 1950 | 356,266 |
| Maryland | 79,739 | 44,083 | 84,920 | 52,050 | 1890 | 141,607 |
| Massachusetts | 286,476 | 274,030 | 268,861 | 272,847 | 1948 | 649,696 |
| Michigan | 15,965 | 9,566 | 14,215 | 9,900 | 1930 | 35,580 |
| Minnesota | 334 | 97 | 329 | 73 | - | (2) |
| Mississippi | 336,369 | 61,180 | 298,206 | 43,949 | 1984 | 476,997 |
| New Hampshire | 10,808 | 8,818 | 11,402 | 10,247 | - | (2) |
| New Jersey | 112,617 | 71,863 | 128,459 | 78,802 | 1956 | 540,060 |
| New York | 38,508 | 54,224 | 37,080 | 51,096 | 1880 | 335,000 |
| North Carolina | 191,281 | 75,823 | 164,476 | 70,582 | 1981 | 432,006 |
| Ohio | 3,438 | 1,062 | 3,389 | 1,344 | 1936 | 31,083 |
| Oregon | 148,601 | 97,695 | 170,052 | 78,846 | 1989 | 170,052 |
| Pennsylvania | 380 | 277 | 495 | 264 | - | (2) |
| Rhode Island | 106,208 | 69,422 | 125,041 | 75,004 | 1889 | 128,056 |
| South Carolina | 16,249 | 21,052 | 20,065 | 24,893 | 1965 | 26,611 |
| Texas | 96,039 | 175,738 | 96,421 | 170,118 | 1960 | 237,684 |
| Virginia | 650,770 | 104,334 | 692,794 | 100,014 | 1983 | 751,069 |
| Washington | 173,553 | 172,274 | 163,003 | 134,585 | 1941 | 197,253 |
| Wisconsin | 18,150 | 5,562 | 17,298 | 5,571 | - | (2) |
| *Total* | *7,192,553* | *3,520,259* | *8,463,080* | *3,238,440* | - | - |

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage Area States are not included.
(2) Not available.
NOTE:--Data are preliminary. Data do not include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, or catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. EEZ (joint venture). Therefore, they will not agree with "U.S. Commercial Landings" table on page 6. Data do not include aquaculture products, except oysters and clams.

## U.S. DOMESTIC LANDINGS, BY REGIONS, 1988 AND 1989 (1)

| Region | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| New England | 569,906 | 493,647 | 565,011 | 508,929 |
| Middle Atlantic | 156,442 | 129,033 | 172,295 | 133,225 |
| Chesapeake | 730,509 | 148,417 | 777,714 | 152,064 |
| South Atlantic | 280,052 | 173,613 | 256,391 | 168,729 |
| Gulf | 1,937,477 | 708,305 | 1,789,394 | 648,908 |
| Pacific Coast and Alaska | 3,456,981 | 1,808,709 | 4,840,244 | 1,559,965 |
| Great Lakes | 40,055 | 18,786 | 37,634 | 19,511 |
| Hawaii | 21,131 | 39,749 | 24,397 | 47,109 |
| *Total* | *7,192,553* | *3,520,259* | *8,463,080* | *3,238,440* |

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage Area States are not included.
NOTE:--Data are preliminary. Data do not include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, or catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. EEZ (joint venture). Therefore, they will not agree with "U.S. Commercial Landings" table on page 6. Data do not include aquaculture products, except oysters and clams.

## COMMERCIAL FISHERY LANDINGS AND VALUE AT MAJOR U.S. PORTS, 1987-89

| Port | Quantity | | | Port | Value | | |
|---|---|---|---|---|---|---|---|
| | 1987 | 1988 | 1989 | | 1987 | 1988 | 1989 |
| | --Million pounds-- | | | | --Million dollars-- | | |
| Dutch Harbor-Unalaska, AK.. | 128.2 | 377.3 | 504.3 | New Bedford, MA..... | 143.7 | 140.9 | 141.0 |
| Cameron, LA..... | 672.4 | 438.9 | 352.7 | Dutch Harbor-Unalaska, AK.. | 62.7 | 100.9 | 107.0 |
| Pascagoula-Moss Point, MS.. | 391.6 | 292.0 | 282.1 | Kodiak, AK..... | 132.1 | *166.3 | 100.2 |
| Empire-Venice, LA..... | 357.4 | 297.2 | 272.7 | Petersburg, AK..... | 36.9 | 58.5 | 61.4 |
| Kodiak, AK..... | 204.1 | 304.6 | 213.2 | Kenai, AK..... | (1) | 99.0 | 56.0 |
| Dulac-Chauvin, LA..... | 331.7 | 244.1 | 210.9 | Brownsville-Port Isabel, TX | 54.2 | 39.7 | 54.1 |
| Intercoastal City, LA..... | 314.3 | 209.7 | 207.2 | Dulac-Chauvin, LA..... | 65.6 | 56.5 | 50.0 |
| Los Angeles, CA..... | 203.1 | 232.0 | 177.6 | Empire-Venice, LA..... | 60.1 | 67.7 | 49.2 |
| Petersburg, AK..... | 42.4 | 50.4 | 113.5 | Ketchikan, AK..... | 22.8 | 43.5 | 45.6 |
| Gloucester, MA..... | 93.0 | 107.4 | 98.5 | Cordova, AK..... | 41.9 | 46.4 | 35.3 |
| Beaufort-Morehead City, NC. | 85.7 | 110.0 | 95.0 | Portland, ME..... | 35.8 | 30.4 | 34.4 |
| Ketchikan, AK..... | 27.6 | 28.3 | 91.6 | Golden Meadow-Leeville, LA. | 36.6 | 37.0 | 33.5 |
| New Bedford, MA..... | 78.7 | 90.3 | 90.4 | Aransas Pass-Rockport, TX.. | 36.4 | 45.6 | 32.0 |
| Morgan City-Berwick, LA.... | 27.0 | 43.3 | 68.1 | Hampton Roads Area, VA..... | 46.2 | 34.5 | 31.1 |
| Cordova, AK..... | 69.6 | 42.5 | 55.3 | Cape May-Wildwood, NJ..... | 30.5 | 28.4 | 30.8 |
| Cape May-Wildwood, NJ..... | 56.8 | 47.9 | 54.0 | Gloucester, MA..... | 34.0 | 30.8 | 30.0 |
| Astoria, OR..... | 46.6 | 44.2 | 51.0 | Beaufort-Morehead City, NC..... | 22.7 | 27.0 | 25.0 |
| Port Hueneme-Oxnard-Ventura, CA..... | 42.3 | 55.0 | 50.9 | Bayou La Batre, AL..... | 29.8 | 23.8 | 24.7 |
| Portland, ME..... | 43.8 | 43.9 | 49.0 | Sitka, AK..... | 33.6 | 37.4 | 24.2 |
| Point Judith, RI..... | 46.6 | 49.6 | 48.3 | Port Arthur, TX..... | 22.9 | 17.4 | 23.8 |
| Newport, OR..... | 35.9 | 38.5 | 44.4 | Point Judith, RI..... | 29.5 | 25.4 | 23.6 |
| Bellingham, WA..... | 47.5 | 35.3 | 40.6 | Seward, AK..... | (1) | 19.5 | 23.1 |
| Crescent City, CA..... | 23.1 | 36.0 | 35.7 | Biloxi, MS..... | 14.2 | 29.5 | 22.2 |
| Kenai, AK..... | (1) | 47.4 | 35.0 | Bellingham, WA..... | 27.4 | 30.1 | 21.3 |
| Coos Bay-Charleston, OR.... | 29.6 | 33.0 | 34.9 | Cameron, LA..... | 31.9 | 33.2 | 20.5 |
| Seward, AK..... | (1) | 23.0 | 34.2 | Los Angeles, CA..... | 55.6 | 34.0 | 20.3 |
| Sitka, AK..... | 27.1 | 27.7 | 30.3 | Astoria, OR..... | 24.6 | 24.3 | 20.0 |
| Westport, WA..... | 26.2 | 34.8 | 30.2 | Newport, OR..... | 21.9 | 24.3 | 19.2 |
| San Francisco Area, CA..... | 27.0 | 25.0 | 29.2 | Homer, AK..... | (1) | 40.2 | 18.2 |
| Wanchese-Stumpy Point, NC.. | 28.3 | 31.0 | 25.0 | Morgan City-Berwick, LA.... | 11.0 | 16.7 | 17.8 |
| Rockland, ME..... | 38.7 | 40.6 | 24.8 | Key West, FL..... | 22.4 | 16.8 | 17.3 |
| Ocean City, MD..... | 22.5 | 21.1 | 24.6 | Westport, WA..... | 15.8 | 21.3 | 17.1 |
| Golden Meadow-Leeville, LA. | 27.4 | 30.1 | 24.5 | Pascagoula-Moss Point, MS.. | 20.3 | 28.2 | 16.9 |
| Hampton Roads Area, VA..... | 29.6 | 20.0 | 24.5 | Coos Bay-Charleston, OR.... | 19.1 | 21.8 | 16.1 |
| Provincetown-Chatham, MA... | 25.3 | 25.2 | 23.7 | Wanchese-Stumpy Point, NC.. | 13.9 | 17.0 | 16.0 |
| Ilwaco-Chinook, WA..... | 18.8 | 23.2 | 23.3 | Cape Canaveral, FL..... | 21.7 | 24.3 | 15.8 |
| Brownsville-Port Isabel, TX | 13.4 | 13.8 | 22.7 | Delcambre, LA..... | 22.1 | 12.7 | 15.7 |
| Fort Bragg, CA..... | 25.9 | 31.0 | 21.7 | Galveston, TX..... | 11.4 | 21.4 | 15.1 |
| Everett, WA..... | 23.5 | 14.5 | 20.4 | Seattle, WA..... | 21.9 | 19.5 | 14.7 |
| Homer, AK..... | (1) | 32.1 | 20.3 | Anacortes-La Conner, WA.... | 10.2 | 8.8 | 13.5 |
| Point Pleasant, NJ..... | 15.2 | 17.3 | 19.2 | Fort Myers, FL..... | 10.4 | 12.7 | 13.1 |
| Eureka, CA..... | 28.5 | 27.0 | 17.9 | Provincetown-Chatham, MA... | 12.7 | 11.6 | 12.9 |
| Boston, MA..... | 23.0 | 20.8 | 17.3 | Boston, MA..... | 16.9 | 14.5 | 12.8 |
| Monterey, CA..... | 16.1 | 14.0 | 16.0 | Ilwaco-Chinook, WA..... | 13.1 | 13.2 | 12.3 |
| Anacortes-La Conner, WA.... | 10.9 | 9.4 | 15.8 | Blaine, WA..... | 15.2 | 11.2 | 12.0 |
| Seattle, WA..... | 22.2 | 17.5 | 15.6 | Crescent City, CA..... | 12.1 | 16.0 | 11.3 |
| Blaine, WA..... | 17.9 | 11.9 | 15.3 | Yakutat, AK..... | (1) | 14.0 | 11.2 |
| Aransas Pass-Rockport, TX.. | 10.2 | 15.6 | 15.0 | Freeport, TX..... | 23.6 | 22.6 | 10.7 |
| Bayou La Batre, AL..... | 15.1 | 12.4 | 14.9 | Grand Isle, LA..... | 12.6 | 12.0 | 10.7 |
| Biloxi, MS..... | 38.2 | 42.3 | 12.6 | Lafitte-Barataria, LA..... | 19.2 | 16.0 | 10.6 |
| Brookings, OR..... | 6.0 | 7.8 | 12.3 | San Francisco Area, CA..... | 12.5 | 15.0 | 10.3 |
| Yakutat, AK..... | (1) | 8.9 | 11.9 | Delacroix-Yscloskey, LA.... | 13.1 | 11.0 | 9.8 |
| Port Arthur, TX..... | 6.7 | 6.2 | 11.5 | Bon Secour-Gulf Shores, AL. | 13.0 | 12.5 | 9.7 |
| Delcambre, LA..... | 13.9 | 10.8 | 11.3 | Intercoastal City, LA..... | 13.4 | 14.7 | 9.5 |
| Fort Myers, FL..... | 8.3 | 10.2 | 10.9 | Ocean City, MD..... | 10.6 | 8.9 | 9.1 |
| Grand Isle, LA..... | 12.3 | 10.8 | 10.8 | Fort Bragg, CA..... | 12.5 | 21.0 | 9.0 |
| Cape Canaveral, FL..... | 14.6 | 16.4 | 10.5 | Montauk, NY..... | 15.9 | 14.7 | 8.5 |
| Montauk, NY..... | 14.7 | 13.2 | 9.6 | Point Pleasant, NJ..... | 6.7 | 7.4 | 8.4 |
| Key West, FL..... | 12.3 | 9.2 | 9.6 | Shelton, WA..... | (1) | (1) | 8.0 |
| Delacroix-Yscloskey, LA..... | 12.5 | 11.1 | 9.5 | Port Hueneme-Oxnard-Ventura, CA..... | 8.1 | 10.0 | 7.9 |

(1) Not available. *Record. Record quantity was 848.2 million lb landed in Los Angeles, California in 1960.

NOTE:--To avoid disclosure of private enterprise certain leading ports have not been included.

## COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS 1989 (1)

| Species | Distance caught off U.S. Shores | | | | International Waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Alewives: | | | | | | | | |
| Atlantic and Gulf. | 4,169 | 508 | - | - | - | - | 4,169 | 508 |
| Great Lakes. . . . | 10,030 | 173 | - | - | - | - | 10,030 | 173 |
| Anchovies. . . . . | 1,469 | 320 | 11,920 | 2,376 | - | - | 13,389 | 2,696 |
| Bluefish . . . . . | 6,470 | 1,437 | 3,959 | 808 | - | - | 10,429 | 2,245 |
| Bonito . . . . . | 306 | 100 | 2,370 | 482 | - | - | 2,676 | 582 |
| Butterfish . . . . . | 785 | 368 | 6,292 | 3,748 | - | - | 7,077 | 4,116 |
| Cod: | | | | | | | | |
| Atlantic . . . . . | 935 | 550 | 77,241 | 47,108 | 247 | 114 | 78,423 | 47,772 |
| Pacific. . . . . | 55,582 | 8,245 | 414,492 | 59,625 | - | - | 470,074 | 67,870 |
| Croaker. . . . . | 7,365 | 3,679 | 922 | 435 | - | - | 8,287 | 4,114 |
| Cusk . . . . . | 4 | 1 | 2,052 | 971 | 2 | 2 | 2,058 | 974 |
| Atlantic and Gulf: | | | | | | | | |
| Blackback. . . . . | 1,502 | 1,500 | 13,153 | 18,109 | - | - | 14,655 | 19,609 |
| Fluke. . . . . | 5,015 | 8,148 | 16,825 | 25,299 | - | - | 21,840 | 33,447 |
| Yellowtail . . . . | 357 | 435 | 11,259 | 12,917 | 678 | 559 | 12,294 | 13,911 |
| Other. . . . . | 1,031 | 985 | 16,093 | 19,016 | 3,082 | 2,711 | 20,206 | 22,712 |
| Pacific. . . . . | 81,226 | 13,031 | 478,705 | 51,300 | - | - | 559,931 | 64,331 |
| *Total . . . . . | *89,131* | *24,099* | *536,035* | *126,641* | *3,760* | *3,270* | *628,926* | *154,010* |
| Groupers . . . . . | 217 | 379 | 14,931 | 25,208 | 1 | 1 | 15,149 | 25,588 |
| Haddock. . . . . | 4 | 7 | 3,766 | 4,498 | 38 | 33 | 3,808 | 4,538 |
| Hake: | | | | | | | | |
| Pacific (whiting). | 195 | 15 | 465,176 | 22,707 | - | - | 465,371 | 22,722 |
| Red. . . . . | 120 | 17 | 3,316 | 574 | - | - | 3,436 | 591 |
| White. . . . . | 44 | 10 | 11,220 | 4,403 | 22 | 10 | 11,286 | 4,423 |
| Halibut. . . . . | 27,697 | 31,046 | 47,453 | 54,046 | 18 | 53 | 75,168 | 85,145 |
| Herring sea: | | | | | | | | |
| Atlantic . . . . . | 30,615 | 1,686 | 86,542 | 4,868 | - | - | 117,157 | 6,554 |
| Pacific. . . . . | 119,346 | 24,391 | - | - | - | - | 119,346 | 24,391 |
| Jack mackerel. . . . | - | - | 28,422 | 1,927 | - | - | 28,422 | 1,927 |
| Lingcod. . . . . | 997 | 346 | 7,006 | 2,439 | - | - | 8,003 | 2,785 |
| Mackerel: | | | | | | | | |
| Atlantic . . . . . | 1,129 | 356 | 31,143 | 3,905 | - | - | 32,272 | 4,261 |
| King . . . . . | 407 | 442 | 3,365 | 3,845 | - | - | 3,772 | 4,287 |
| Pacific. . . . . | 20 | 11 | 88,647 | 6,012 | - | - | 88,667 | 6,023 |
| Spanish. . . . . | 1,533 | 603 | 5,226 | 2,434 | - | - | 6,759 | 3,037 |

See footnotes at end of table.

(Continued)

## COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS 1989 (1) - Continued

| Species | Distance caught off U.S. Shores | | | | International Waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish - Continued: | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Menhaden: | | | | | | | | |
| Atlantic | 735,856 | 32,663 | 50,909 | 915 | - | - | 786,765 | 33,578 |
| Gulf | 929,139 | 38,493 | 356,899 | 13,840 | - | - | 1,286,038 | 52,333 |
| *Total* | *1,664,995* | *71,156* | *407,808* | *14,755* | - | - | *2,072,803* | *85,911* |
| Mullet | 31,590 | 15,020 | 4 | 3 | - | - | 31,594 | 15,023 |
| Ocean perch: | | | | | | | | |
| Atlantic | 3 | 2 | 1,389 | 917 | - | - | 1,392 | 919 |
| Pacific | 13,953 | 2,588 | 8,379 | 2,058 | - | - | 22,332 | 4,646 |
| Pollock: | | | | | | | | |
| Atlantic | 42 | 19 | 23,189 | 9,897 | 18 | 6 | 23,249 | 9,922 |
| Alaska | 354,298 | 28,038 | 2,642,075 | 199,261 | - | - | 2,996,373 | 227,299 |
| Rockfishes | 27,282 | 8,757 | 106,341 | 33,581 | - | - | 133,623 | 42,338 |
| Sablefish | 11,059 | 8,989 | 86,531 | 64,283 | - | - | 97,590 | 73,272 |
| Salmon, Pacific: | | | | | | | | |
| Chinook or king | 25,973 | 37,485 | 5,493 | 11,046 | - | - | 31,466 | 48,531 |
| Chum or keta | 68,685 | 30,078 | - | - | - | - | 68,685 | 30,078 |
| Pink | 367,888 | 132,777 | 10 | 7 | - | - | 367,898 | 132,784 |
| Red or sockeye | 274,051 | 346,442 | - | - | - | - | 274,051 | 346,442 |
| Silver or coho | 41,230 | 30,874 | 2,538 | 2,525 | - | - | 43,768 | 33,399 |
| *Total* | *777,827* | *577,656* | *8,041* | *13,578* | - | - | *785,868* | *591,234* |
| Scup or porgy | 1,503 | 1,335 | 8,079 | 6,385 | - | - | 9,582 | 7,720 |
| Sea bass: | | | | | | | | |
| Black | 378 | 636 | 3,476 | 3,892 | - | - | 3,854 | 4,528 |
| White | 37 | 80 | 57 | 122 | - | - | 94 | 202 |
| Sea trout: | | | | | | | | |
| Gray | 8,942 | 4,815 | 5,245 | 2,345 | - | - | 14,187 | 7,160 |
| Spotted | 3,431 | 3,380 | 7 | 6 | - | - | 3,438 | 3,386 |
| White | 205 | 107 | 94 | 29 | - | - | 299 | 136 |
| Sharks: | | | | | | | | |
| Dogfish | 3,336 | 780 | 9,465 | 822 | 3 | (3) | 12,804 | 1,602 |
| Other | 1,495 | 661 | 15,637 | 8,670 | 42 | 33 | 17,174 | 9,364 |
| Snapper: | | | | | | | | |
| Red | 153 | 539 | 3,776 | 9,745 | 30 | 45 | 3,959 | 10,329 |
| Other | 831 | 1,521 | 5,985 | 10,922 | - | - | 6,816 | 12,443 |
| Striped bass | 281 | 468 | 4 | 9 | - | - | 285 | 477 |
| Swordfish | 7 | 20 | 11,386 | 37,307 | 375 | 994 | 11,768 | 38,321 |
| Tilefish | - | - | 2,542 | 4,246 | - | - | 2,542 | 4,246 |

See footnotes at end of table.

(Continued)

## COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS 1989 (1) - Continued

| Species | Distance caught off U.S. Shores | | | | International Waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish - Continued | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Tuna: | | | | | | | | |
| Albacore | 5 | 1 | 3,392 | 2,728 | 8,709 | 7,781 | 12,106 | 10,510 |
| Bigeye | 171 | 594 | 4,205 | 14,400 | 171 | 593 | 4,547 | 15,587 |
| Bluefin | 3 | 27 | 3,191 | 22,142 | 1,555 | 724 | 4,749 | 22,893 |
| Skipjack | 290 | 322 | 3,362 | 3,542 | 241,940 | 97,689 | 245,592 | 101,553 |
| Yellowfin | 360 | 543 | 20,354 | 35,116 | 252,942 | 121,951 | 273,656 | 157,610 |
| Unclassified | 89 | 20 | 710 | 763 | 14 | 16 | 813 | 799 |
| *Total* | *918* | *1,507* | *35,214* | *78,691* | *505,331* | *228,754* | *541,463* | *308,952* |
| Whiting | 800 | 189 | 38,553 | 9,214 | - | - | 39,353 | 9,403 |
| Other marine finfishes | 174,771 | 47,430 | 83,139 | 28,557 | 132 | 45 | 258,042 | 76,032 |
| Other freshwater finfishes | 27,198 | 19,037 | - | - | - | - | 27,198 | 19,037 |
| *Total fish* | *3,463,905* | *893,519* | *5,357,889* | *918,311* | *510,042* | *233,404* | *9,331,836* | *2,045,234* |
| Shellfish et al. | | | | | | | | |
| Clams: | | | | | | | | |
| Hard | 9,278 | 44,925 | - | - | - | - | 9,278 | 44,925 |
| Ocean quahog | 406 | 980 | 50,619 | 15,406 | - | - | 51,025 | 16,386 |
| Soft | 6,829 | 19,854 | - | - | - | - | 6,829 | 19,854 |
| Surf | 17,833 | 7,677 | 49,239 | 23,041 | - | - | 67,072 | 30,718 |
| Other | 3,962 | 23,060 | - | - | - | - | 3,962 | 23,060 |
| *Total* | *38,308* | *96,496* | *99,858* | *38,447* | - | - | *138,166* | *134,943* |
| Crabs: | | | | | | | | |
| Blue hard | 206,714 | 80,988 | 6 | 1 | - | - | 206,720 | 80,989 |
| Dungeness | 31,574 | 35,182 | 9,410 | 10,352 | - | - | 40,984 | 45,534 |
| King | 13,413 | 53,932 | 12,978 | 52,272 | - | - | 26,391 | 106,204 |
| Snow (tanner) | 7,552 | 22,048 | 157,091 | 138,034 | - | - | 164,643 | 160,082 |
| Other | 7,086 | 6,652 | 12,554 | 14,940 | - | - | 19,640 | 21,592 |
| *Total* | *266,339* | *198,802* | *192,039* | *215,599* | - | - | *458,378* | *414,401* |
| Lobsters: | | | | | | | | |
| American | 45,539 | 124,405 | 7,387 | 24,710 | - | - | 52,926 | 149,115 |
| Spiny | 1,753 | 6,135 | 6,372 | 20,312 | - | - | 8,125 | 26,447 |

See footnotes at end of table.

(Continued)

## COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS 1989 (1) - Continued

| Species | Distance caught off U.S. Shores | | | | International Waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Shellfish et al. | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Oysters | 29,926 | 83,585 | - | - | - | - | 29,926 | 83,585 |
| Scallops: | | | | | | | | |
| Bay | 274 | 1,678 | - | - | - | - | 274 | 1,678 |
| Calico | - | - | 6,580 | 5,928 | - | - | 6,580 | 5,928 |
| Sea | 1,943 | 6,725 | 31,814 | 125,869 | - | - | 33,757 | 132,594 |
| Shrimp: | | | | | | | | |
| New England | 801 | 901 | 7,149 | 6,907 | - | - | 7,950 | 7,808 |
| South Atlantic | 22,715 | 42,286 | 10,988 | 11,275 | - | - | 33,703 | 53,561 |
| Gulf | 136,493 | 173,598 | 96,651 | 208,104 | - | - | 233,144 | 381,702 |
| Pacific Coast | 16,443 | 7,136 | 65,050 | 25,053 | - | - | 81,493 | 32,189 |
| *Total* | *176,452* | *223,921* | *179,838* | *251,339* | - | - | *356,290* | *475,260* |
| Squid: | | | | | | | | |
| Atlantic | 6,641 | 3,032 | 60,188 | 22,560 | - | - | 66,829 | 25,592 |
| Pacific | 38,700 | 3,553 | 22,045 | 1,956 | - | - | 60,745 | 5,509 |
| Other shellfish | 104,608 | 60,987 | 6,335 | 3,844 | - | - | 110,943 | 64,831 |
| *Total shellfish et al.* | *710,493* | *809,346* | *612,456* | *710,564* | - | - | *1,322,949* | *1,519,910* |
| *Grand total, 1989* | *4,174,398* | *1,702,865* | *5,970,345* | *1,628,875* | *510,042* | *233,404* | *10,654,785* | *3,565,144* |
| *Grand total, 1988 (4)* | *3,884,674* | *2,026,147* | *6,510,335* | *1,671,279* | *572,617* | *312,642* | *10,967,626* | *4,010,068* |

(1) Landings are reported in round (live) weight for all items, except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). The National Marine Fisheries Service estimated the distance from shore for Texas landings data collected by Texas Parks and Wildlife Department.

(2) Includes landings from the Great Lakes and other inland waters, but excludes Mississippi River Drainage Area States.

(3) Less than $500.

(4) For individual species breakout see "Fisheries of the United States, 1988" pages 6-9.

NOTE:--Data are preliminary. Data include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, and catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. EEZ (joint ventures). Therefore, they will not agree with "U.S. Commercial Landings" tables beginning on page 1. Data do not include aquaculture products, except oysters and clams.

## COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS 1989 (1)

| Species | Distance caught off U.S. Shores | | | | International Waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Alewives: | | | | | | | | |
| Atlantic and Gulf. | 1,891 | 508 | - | - | - | - | 1,891 | 508 |
| Great Lakes. . . . | 4,550 | 173 | - | - | - | - | 4,550 | 173 |
| Anchovies. . . . . | 666 | 320 | 5,407 | 2,376 | - | - | 6,073 | 2,696 |
| Bluefish . . . . . | 2,935 | 1,437 | 1,796 | 808 | - | - | 4,731 | 2,245 |
| Bonito . . . . . | 139 | 100 | 1,075 | 482 | - | - | 1,214 | 582 |
| Butterfish . . . . . | 356 | 368 | 2,854 | 3,748 | - | - | 3,210 | 4,116 |
| Cod: | | | | | | | | |
| Atlantic . . . . . | 424 | 550 | 35,036 | 47,108 | 112 | 114 | 35,572 | 47,772 |
| Pacific. . . . . | 25,212 | 8,245 | 188,012 | 59,625 | - | - | 213,224 | 67,870 |
| Croaker. . . . . | 3,341 | 3,679 | 418 | 435 | - | - | 3,759 | 4,114 |
| Cusk . . . . . | 2 | 1 | 931 | 971 | 1 | 2 | 934 | 974 |
| Atlantic and Gulf: | | | | | | | | |
| Blackback. . . . . | 681 | 1,500 | 5,966 | 18,109 | - | - | 6,647 | 19,609 |
| Fluke. . . . . | 2,275 | 8,148 | 7,632 | 25,299 | - | - | 9,907 | 33,447 |
| Yellowtail . . . . | 162 | 435 | 5,107 | 12,917 | 308 | 559 | 5,577 | 13,911 |
| Other. . . . . | 468 | 985 | 7,300 | 19,016 | 1,398 | 2,711 | 9,165 | 22,712 |
| Pacific. . . . . | 36,844 | 13,031 | 217,139 | 51,300 | - | - | 253,983 | 64,331 |
| *Total . . . . . | *40,430* | *24,099* | *243,144* | *126,641* | *1,706* | *3,270* | *285,279* | *154,010* |
| Groupers . . . . . | 98 | 379 | 6,773 | 25,208 | (3) | 1 | 6,872 | 25,588 |
| Haddock. . . . . | 2 | 7 | 1,708 | 4,498 | 17 | 33 | 1,727 | 4,538 |
| Hake: | | | | | | | | |
| Pacific (whiting). | 88 | 15 | 211,002 | 22,707 | - | - | 211,091 | 22,722 |
| Red. . . . . | 54 | 17 | 1,504 | 574 | - | - | 1,559 | 591 |
| White. . . . . | 20 | 10 | 5,089 | 4,403 | 10 | 10 | 5,119 | 4,423 |
| Halibut. . . . . | 12,563 | 31,046 | 21,525 | 54,046 | 8 | 53 | 34,096 | 85,145 |
| Herring sea: | | | | | | | | |
| Atlantic . . . . . | 13,887 | 1,686 | 39,255 | 4,868 | - | - | 53,142 | 6,554 |
| Pacific. . . . . | 54,135 | 24,391 | - | - | - | - | 54,135 | 24,391 |
| Jack mackerel. . . . | - | - | 12,892 | 1,927 | - | - | 12,892 | 1,927 |
| Lingcod. . . . . | 452 | 346 | 3,178 | 2,439 | - | - | 3,630 | 2,785 |
| Mackerel: | | | | | | | | |
| Atlantic . . . . . | 512 | 356 | 14,126 | 3,905 | - | - | 14,638 | 4,261 |
| King . . . . . | 185 | 442 | 1,526 | 3,845 | - | - | 1,711 | 4,287 |
| Pacific. . . . . | 9 | 11 | 40,210 | 6,012 | - | - | 40,219 | 6,023 |
| Spanish. . . . . | 695 | 603 | 2,370 | 2,434 | - | - | 3,066 | 3,037 |

See footnotes at end of table.

(Continued)

## COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS 1989 (1) - Continued

| Species | Distance caught off U.S. Shores | | | | International Waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish - Continued: | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Menhaden: | | | | | | | | |
| Atlantic | 333,782 | 32,663 | 23,092 | 915 | - | - | 356,874 | 33,578 |
| Gulf | 421,455 | 38,493 | 161,888 | 13,840 | - | - | 583,343 | 52,333 |
| *Total* | *755,237* | *71,156* | *184,980* | *14,755* | - | - | *940,217* | *85,911* |
| Mullet | 14,329 | 15,020 | - | - | - | - | 14,331 | 15,023 |
| Ocean perch: | | | | | | | | |
| Atlantic | 1 | 2 | 630 | 917 | - | - | 631 | 919 |
| Pacific | 6,329 | 2,588 | 3,801 | 2,058 | - | - | 10,130 | 4,646 |
| Pollock: | | | | | | | | |
| Atlantic | 19 | 19 | 10,518 | 9,897 | 8 | 6 | 10,546 | 9,922 |
| Alaska | 160,709 | 28,038 | 1,198,437 | 199,261 | - | - | 1,359,146 | 227,299 |
| Rockfishes | 12,375 | 8,757 | 48,236 | 33,581 | - | - | 60,611 | 42,338 |
| Sablefish | 5,016 | 8,989 | 39,250 | 64,283 | - | - | 44,267 | 73,272 |
| Salmon, Pacific: | | | | | | | | |
| Chinook or king | 11,781 | 37,485 | 2,492 | 11,046 | - | - | 14,273 | 48,531 |
| Chum or keta | 31,155 | 30,078 | - | - | - | - | 31,155 | 30,078 |
| Pink | 166,873 | 132,777 | - | - | - | - | 166,877 | 132,784 |
| Red or sockeye | 124,309 | 346,442 | - | - | - | - | 124,309 | 346,442 |
| Silver or coho | 18,702 | 30,874 | 1,151 | 2,525 | - | - | 19,853 | 33,399 |
| *Total* | *352,820* | *577,656* | *3,647* | *13,578* | - | - | *356,467* | *591,234* |
| Scup or porgy | 682 | 1,335 | 3,665 | 6,385 | - | - | 4,346 | 7,720 |
| Sea bass: | | | | | | | | |
| Black | 171 | 636 | 1,577 | 3,892 | - | - | 1,748 | 4,528 |
| White | 17 | 80 | 26 | 122 | - | - | 43 | 202 |
| Sea trout: | | | | | | | | |
| Gray | 4,056 | 4,815 | 2,379 | 2,345 | - | - | 6,435 | 7,160 |
| Spotted | 1,556 | 3,380 | 3 | 6 | - | - | 1,559 | 3,386 |
| White | 93 | 107 | 43 | 29 | - | - | 136 | 136 |
| Sharks: | | | | | | | | |
| Dogfish | 1,513 | 780 | 4,293 | 822 | 1 | (3) | 5,808 | 1,602 |
| Other | 678 | 661 | 7,093 | 8,670 | 19 | 33 | 7,790 | 9,364 |
| Snapper: | | | | | | | | |
| Red | 69 | 539 | 1,713 | 9,745 | 14 | 45 | 1,796 | 10,329 |
| Other | 377 | 1,521 | 2,715 | 10,922 | - | - | 3,092 | 12,443 |
| Striped bass | 127 | 468 | 2 | 9 | - | - | 129 | 477 |
| Swordfish | 3 | 20 | 5,165 | 37,307 | 170 | 994 | 5,338 | 38,321 |
| Tilefish | - | - | 1,153 | 4,246 | - | - | 1,153 | 4,246 |

See footnotes at end of table.

(Continued)

## COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS 1989 (1) - Continued

| Species | Distance caught off U.S. Shores | | | | International Waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Fish - Continued | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Tuna: | | | | | | | | |
| Albacore | 2 | 1 | 1,539 | 2,728 | 3,950 | 7,781 | 5,491 | 10,510 |
| Bigeye | 78 | 594 | 1,907 | 14,400 | 78 | 593 | 2,063 | 15,587 |
| Bluefin | 1 | 27 | 1,447 | 22,142 | 705 | 724 | 2,154 | 22,893 |
| Skipjack | 132 | 322 | 1,525 | 3,542 | 109,743 | 97,689 | 111,400 | 101,553 |
| Yellowfin | 163 | 543 | 9,233 | 35,116 | 114,734 | 121,951 | 124,130 | 157,610 |
| Unclassified | 40 | 20 | 322 | 763 | - | - | 369 | 799 |
| *Total* | *416* | *1,507* | *15,973* | *78,691* | *229,217* | *228,754* | *245,606* | *308,952* |
| Whiting | 363 | 189 | 17,488 | 9,214 | - | - | 17,850 | 9,403 |
| Other marine: finfishes | 79,276 | 47,430 | 37,712 | 28,557 | 60 | 45 | 117,047 | 76,032 |
| Other freshwater: finfishes | 12,337 | 19,037 | - | - | - | - | 12,337 | 19,037 |
| *Total fish* | *1,571,217* | *893,519* | *2,430,323* | *918,311* | *231,354* | *233,404* | *4,232,893* | *2,045,234* |
| Shellfish et al. | | | | | | | | |
| Clams: | | | | | | | | |
| Hard | 4,208 | 44,925 | - | - | - | - | 4,208 | 44,925 |
| Ocean quahog | 184 | 980 | 22,961 | 15,406 | - | - | 23,145 | 16,386 |
| Soft | 3,098 | 19,854 | - | - | - | - | 3,098 | 19,854 |
| Surf | 8,089 | 7,677 | 22,335 | 23,041 | - | - | 30,424 | 30,718 |
| Other | 1,797 | 23,060 | - | - | - | - | 1,797 | 23,060 |
| *Total* | *17,376* | *96,496* | *45,295* | *38,447* | *-* | *-* | *62,672* | *134,943* |
| Crabs: | | | | | | | | |
| Blue hard | 93,765 | 80,988 | 3 | 1 | - | - | 93,768 | 80,989 |
| Dungeness | 14,322 | 35,182 | 4,268 | 10,352 | - | - | 18,590 | 45,534 |
| King | 6,084 | 53,932 | 5,887 | 52,272 | - | - | 11,971 | 106,204 |
| Snow (tanner) | 3,426 | 22,048 | 71,256 | 138,034 | - | - | 74,682 | 160,082 |
| Other | 3,214 | 6,652 | 5,694 | 14,940 | - | - | 8,909 | 21,592 |
| *Total* | *120,811* | *198,802* | *87,108* | *215,599* | *-* | *-* | *207,919* | *414,401* |
| Lobsters: | | | | | | | | |
| American | 20,656 | 124,405 | 3,351 | 24,710 | - | - | 24,007 | 149,115 |
| Spiny | 795 | 6,135 | 2,890 | 20,312 | - | - | 3,685 | 26,447 |

See footnotes at end of table.

(Continued)

## COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS 1989 (1) - Continued

| Species | Distance caught off U.S. Shores | | | | International Waters (Includes catch off foreign coasts) | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | 0 to 3 Miles (2) | | 3 to 200 Miles | | | | | |
| Shellfish et al. | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Oysters. . . . . | 13,574 | 83,585 | - | - | - | - | 13,574 | 83,585 |
| Scallops: | | | | | | | | |
| Bay. . . . . | 124 | 1,678 | - | - | - | - | 124 | 1,678 |
| Calico . . . . . | - | - | 2,985 | 5,928 | - | - | 2,985 | 5,928 |
| Sea. . . . . | 881 | 6,725 | 14,431 | 125,869 | - | - | 15,312 | 132,594 |
| Shrimp: | | | | | | | | |
| New England. . . . | 363 | 901 | 3,243 | 6,907 | - | - | 3,606 | 7,808 |
| South Atlantic . . | 10,303 | 42,286 | 4,984 | 11,275 | - | - | 15,288 | 53,561 |
| Gulf . . . . . | 61,913 | 173,598 | 43,841 | 208,104 | - | - | 105,753 | 381,702 |
| Pacific Coast. . . | 7,458 | 7,136 | 29,506 | 25,053 | - | - | 36,965 | 32,189 |
| *Total . . . . .* | *80,038* | *223,921* | *81,574* | *251,339* | - | - | *161,612* | *475,260* |
| Squid: | | | | | | | | |
| Atlantic . . . . . | 3,012 | 3,032 | 27,301 | 22,560 | - | - | 30,313 | 25,592 |
| Pacific. . . . . | 17,554 | 3,553 | 10,000 | 1,956 | - | - | 27,554 | 5,509 |
| Other shellfish. . . | 47,450 | 60,987 | 2,874 | 3,844 | - | - | 50,323 | 64,831 |
| *Total shell-fish et al. . . .* | *322,278* | *809,346* | *277,808* | *710,564* | - | - | *600,086* | *1,519,910* |
| *Grand total, 1989 . . . . . .* | *1,893,495* | *1,702,865* | *2,708,131* | *1,628,875* | *231,354* | *233,404* | *4,832,979* | *3,565,144* |
| *Grand total, 1988 (4) . . . .* | *1,762,077* | *2,026,147* | *2,953,069* | *1,671,279* | *259,737* | *312,642* | *4,974,883* | *4,010,068* |

(1) Landings are reported in round (live) weight for all items, except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). The National Marine Fisheries Service estimated the distance from shore for Texas landings data collected by Texas Parks and Wildlife Department.

(2) Includes landings from the Great Lakes and other inland waters, but excludes Mississippi River Drainage Area States.

(3) Less than 1 metric tons or $500.

(4) For individual species breakout see "Fisheries of the United States, 1988" pages 10-13.

NOTE:--Data are preliminary. Data include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, and catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. EEZ (joint ventures). Therefore, they will not agree with "U.S. Commercial Landings" tables beginning on page 1. Data do not include aquaculture products, except oysters and clams. Data may not add due to converting to metric tons.

# U.S. COMMERCIAL LANDINGS

## HISTORICAL FISHERY STATISTICS

### SUMMARY OF AMERICAN LOBSTER LANDINGS, BY REGIONS, 1930-1989 (1)

| Year | New England | | Middle Atlantic | | Chesapeake | | Grand Total | |
|---|---|---|---|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| 1930 .... | 12,357 | 3,217 | 1,559 | 369 | - | - | 13,916 | 3,586 |
| 1931 .... | 11,312 | 2,718 | 1,149 | 292 | (2) | (2) | 12,461 | 3,010 |
| 1932 .... | 10,279 | 1,913 | 878 | 166 | (2) | (2) | 11,157 | 2,079 |
| 1933 .... | 9,088 | 1,608 | 724 | 137 | (2) | (2) | 9,812 | 1,745 |
| 1934 .... | (3) | (3) | (3) | (3) | (2) | (2) | (3) | (3) |
| 1935 .... | 10,852 | 2,520 | 643 | 139 | 1 | (2) | 11,496 | 2,659 |
| 1936 .... | (3) | (3) | (3) | (3) | (2) | (2) | (3) | (3) |
| 1937 .... | 10,936 | 2,304 | 640 | 133 | - | - | 11,576 | 2,437 |
| 1938 .... | 11,408 | 2,143 | 574 | 102 | 2 | (2) | 11,984 | 2,245 |
| 1939 .... | 11,312 | 1,964 | 672 | 115 | 1 | (2) | 11,985 | 2,079 |
| 1940 .... | 11,165 | 2,001 | 594 | 130 | 2 | (2) | 11,761 | 2,131 |
| 1941 .... | (3) | (3) | (3) | (3) | 1 | (2) | (3) | (3) |
| 1942 .... | 11,792 | 2,740 | 507 | 112 | 1 | (2) | 12,300 | 2,852 |
| 1943 .... | 15,651 | 4,200 | 773 | 205 | (3) | (3) | (3) | (3) |
| 1944 .... | 17,203 | 4,202 | 725 | 228 | 1 | (2) | 17,929 | 4,430 |
| 1945 .... | 22,267 | 9,307 | 460 | 154 | 1 | (2) | 22,728 | 9,461 |
| 1946 .... | (3) | (3) | (3) | (3) | 1 | (2) | (3) | (3) |
| 1947 .... | 23,316 | 8,718 | 609 | 273 | 2 | 1 | 23,927 | 8,992 |
| 1948 .... | 20,226 | 8,396 | 759 | 331 | 2 | 1 | 20,987 | 8,728 |
| 1949 .... | 23,994 | 8,594 | 660 | 309 | 2 | (2) | 24,656 | 8,903 |
| 1950 .... | 22,559 | 8,108 | 635 | 236 | 4 | 1 | 23,198 | 8,345 |
| 1951 .... | 25,534 | 9,221 | 409 | 157 | 3 | 1 | 25,946 | 9,379 |
| 1952 .... | 24,323 | 10,301 | 706 | 254 | 3 | 1 | 25,032 | 10,556 |
| 1953 .... | 27,136 | 10,482 | 966 | 383 | 13 | 5 | 28,115 | 10,870 |
| 1954 .... | 26,433 | 10,131 | 1,035 | 352 | 13 | 3 | 27,481 | 10,486 |
| 1955 .... | 27,624 | 10,873 | 1,315 | 424 | 15 | 5 | 28,954 | 11,302 |
| 1956 .... | 25,171 | 11,452 | 1,340 | 452 | 9 | 4 | 26,520 | 11,908 |
| 1957 .... | 29,106 | 11,146 | 1,046 | 365 | 3 | 1 | 30,155 | 11,512 |
| 1958 .... | 25,873 | 12,761 | 1,347 | 455 | 7 | 2 | 27,227 | 13,218 |
| 1959 .... | 27,393 | 13,874 | 1,665 | 584 | 27 | 10 | 29,085 | 14,468 |
| 1960 .... | 29,260 | 13,582 | 1,876 | 656 | 32 | 13 | 31,168 | 14,251 |
| 1961 .... | 25,931 | 13,767 | 2,051 | 798 | 16 | 7 | 27,998 | 14,572 |
| 1962 .... | 28,286 | 14,410 | 1,186 | 532 | 25 | 11 | 29,497 | 14,953 |
| 1963 .... | 29,120 | 16,212 | 1,130 | 547 | 24 | 10 | 30,274 | 16,769 |
| 1964 .... | 29,318 | 19,020 | 1,608 | 822 | 32 | 14 | 30,958 | 19,856 |
| 1965 .... | 28,530 | 20,930 | 1,668 | 1,008 | 48 | 19 | 30,246 | 21,957 |
| 1966 .... | 28,007 | 21,118 | 1,494 | 1,127 | 40 | 21 | 29,541 | 22,266 |
| 1967 .... | 24,766 | 20,793 | 1,759 | 1,464 | 216 | 129 | (4) 26,745 | (4) 22,389 |
| 1968 .... | 30,034 | 23,206 | 2,378 | 2,158 | 116 | 75 | (4) 32,558 | (4) 25,452 |
| 1969 .... | 30,711 | 26,172 | 2,850 | 2,668 | 207 | 144 | (4) 33,787 | (4) 28,998 |
| 1970 .... | 30,413 | 29,704 | 3,483 | 3,586 | 251 | 169 | (4) 34,152 | (4) 33,464 |
| 1971 .... | 30,283 | 31,811 | 3,143 | 3,555 | 262 | 228 | 33,688 | 35,594 |
| 1972 .... | 28,864 | 34,769 | 2,475 | 3,689 | 905 | 1,054 | 32,244 | 39,512 |
| 1973 .... | 26,482 | 37,553 | 2,284 | 3,713 | 223 | 318 | (4) 28,991 | (4) 41,586 |
| 1974 .... | 26,284 | 39,358 | 1,948 | 3,367 | 311 | 569 | 28,543 | 43,294 |
| 1975 .... | 28,503 | 48,138 | 1,547 | 3,004 | 150 | 270 | 30,200 | 51,412 |
| 1976 .... | 29,957 | 48,765 | 1,265 | 2,629 | 261 | 517 | 31,483 | 51,911 |
| 1977 .... | 30,326 | 54,850 | 1,346 | 2,803 | 101 | 216 | 31,773 | 57,869 |
| 1978 .... | 13,619 | 61,292 | 1,538 | 3,398 | 57 | 126 | (4) 15,214 | (4) 64,816 |
| 1979 .... | 35,563 | 68,273 | 1,544 | 3,692 | 93 | 251 | 37,200 | 72,216 |
| 1980 .... | 35,849 | 72,686 | 1,287 | 3,208 | 79 | 224 | 37,215 | 76,118 |
| 1981 .... | 37,527 | 81,286 | 1,540 | 4,240 | 65 | 210 | 39,132 | 85,736 |
| 1982 .... | 40,954 | 93,585 | 2,059 | 5,643 | 70 | 218 | 43,083 | 99,446 |
| 1983 .... | 42,676 | 102,395 | 2,035 | 5,743 | 87 | 289 | 44,798 | 108,427 |
| 1984 .... | 43,091 | 115,175 | 2,340 | 6,969 | 116 | 390 | 45,547 | 122,534 |
| 1985 .... | 44,430 | 109,508 | 2,439 | 7,103 | 83 | 284 | 46,952 | 116,895 |
| 1986 .... | 43,027 | 111,375 | 2,639 | 8,162 | 59 | 200 | 45,725 | 119,737 |
| 1987 .... | 43,174 | 133,316 | 2,628 | 8,391 | 51 | 196 | 45,853 | 141,903 |
| 1988 .... | 45,165 | 133,578 | 3,402 | 11,339 | 76 | 319 | 48,643 | 145,236 |
| 1989 .... | 48,591 | 135,253 | 4,273 | 13,607 | 62 | 255 | 52,926 | 149,115 |

(1) Data for 1978-1989 are preliminary. (2) Less than 500 lb or $500.
(3) Data not available. (4) Includes landings from the South Atlantic Region.

# U.S. COMMERCIAL LANDINGS

## HISTORICAL FISHERY STATISTICS

### SUMMARY OF SPINY LOBSTER LANDINGS, BY REGIONS, 1930-1989 (1)

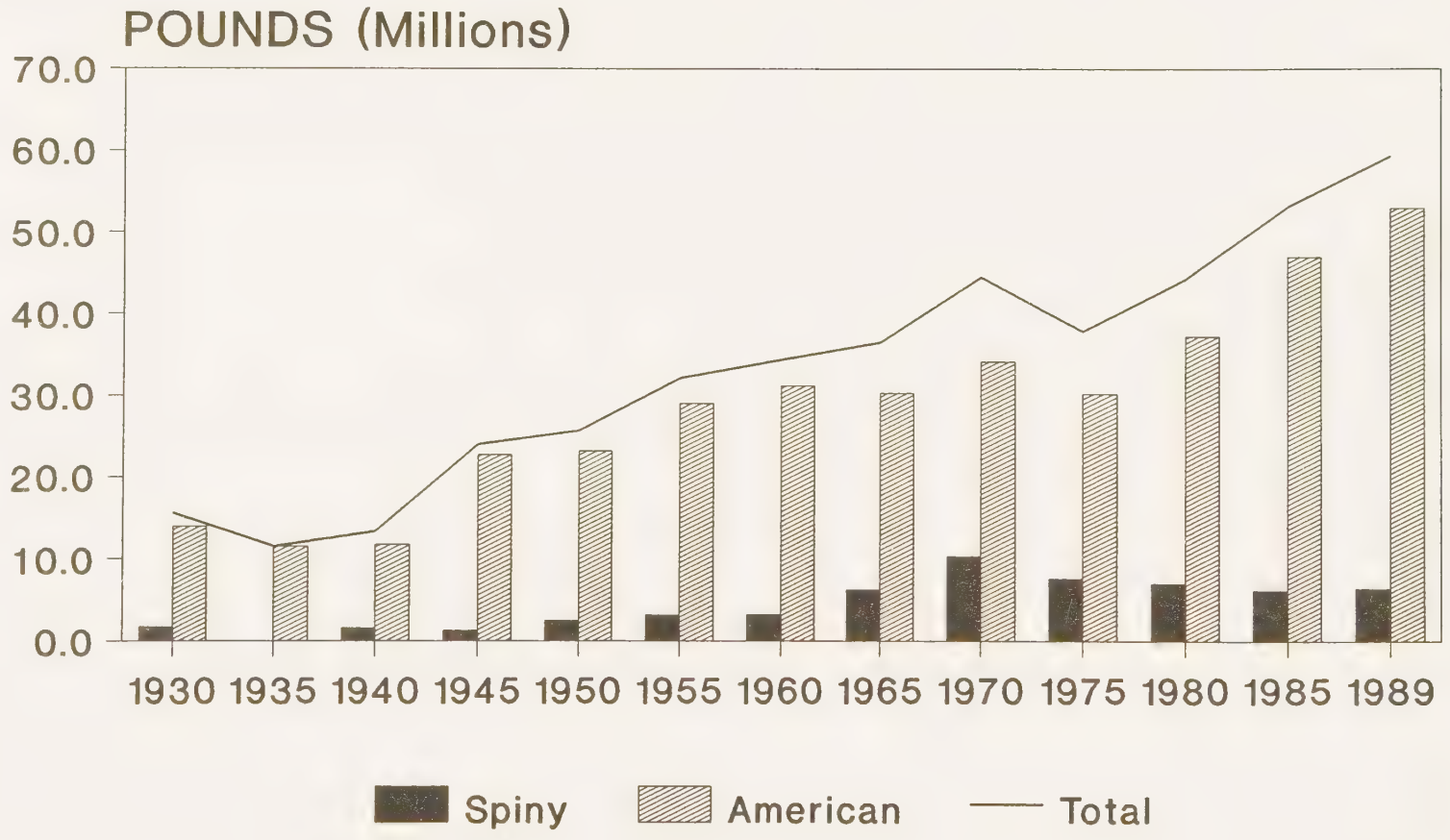
| Year | South Atlantic | | Gulf | | Pacific (2) | | Grand Total | |
|---|---|---|---|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| 1930 .... | 108 | 12 | 180 | 14 | 1,394 | 263 | 1,682 | 289 |
| 1931 .... | 304 | 31 | 152 | 11 | 1,340 | 223 | 1,796 | 265 |
| 1932 .... | 347 | 26 | 98 | 6 | 1,018 | 142 | 1,463 | 174 |
| 1933 .... | (3) | (3) | (3) | (3) | 1,050 | 145 | (3) | (3) |
| 1934 .... | 183 | 10 | 168 | 7 | 1,183 | 180 | 1,534 | 197 |
| 1935 .... | (3) | (3) | (3) | (3) | 1,345 | 214 | (3) | (3) |
| 1936 .... | 211 | 14 | 116 | 6 | 1,335 | 148 | 1,662 | 168 |
| 1937 .... | 225 | 18 | 68 | 4 | 1,322 | 163 | 1,615 | 185 |
| 1938 .... | 265 | 20 | 63 | 3 | 1,198 | 179 | 1,526 | 202 |
| 1939 .... | 234 | 16 | 125 | 8 | 1,290 | 207 | 1,649 | 231 |
| 1940 .... | 256 | 19 | 208 | 12 | 1,097 | 169 | 1,561 | 200 |
| 1941 .... | (3) | (3) | (3) | (3) | 1,306 | 202 | (3) | (3) |
| 1942 .... | (3) | (3) | (3) | (3) | 169 | 41 | (3) | (3) |
| 1943 .... | (3) | (3) | (3) | (3) | 299 | 93 | (3) | (3) |
| 1944 .... | (3) | (3) | (3) | (3) | 513 | 136 | (3) | (3) |
| 1945 .... | 572 | 116 | 205 | 41 | 479 | 115 | 1,256 | 272 |
| 1946 .... | (3) | (3) | (3) | (3) | 692 | 234 | (3) | (3) |
| 1947 .... | (3) | (3) | (3) | (3) | 593 | 189 | (3) | (3) |
| 1948 .... | (3) | (3) | (3) | (3) | 563 | 229 | (3) | (3) |
| 1949 .... | (3) | (3) | 1,482 | 189 | 834 | 284 | (3) | (3) |
| 1950 .... | 932 | 168 | 628 | 113 | 933 | 296 | 2,493 | 577 |
| 1951 .... | 2,020 | 384 | 1,077 | 205 | 824 | 302 | 3,921 | 891 |
| 1952 .... | 656 | 164 | 957 | 239 | 807 | 337 | 2,420 | 740 |
| 1953 .... | 1,121 | 224 | 874 | 175 | 750 | 353 | 2,745 | 752 |
| 1954 .... | 1,223 | 269 | 724 | 159 | 902 | 409 | 2,849 | 837 |
| 1955 .... | 1,079 | 248 | 1,216 | 280 | 859 | 434 | 3,154 | 962 |
| 1956 .... | 799 | 228 | 2,314 | 597 | 736 | 385 | 3,849 | 1,210 |
| 1957 .... | 651 | 200 | 3,388 | 923 | 648 | 377 | 4,687 | 1,500 |
| 1958 .... | 623 | 184 | 2,332 | 653 | 633 | 389 | 3,588 | 1,226 |
| 1959 .... | 543 | 176 | 2,637 | 778 | 506 | 306 | 3,686 | 1,260 |
| 1960 .... | 719 | 281 | 2,129 | 820 | 351 | 236 | 3,199 | 1,337 |
| 1961 .... | 702 | 249 | 2,101 | 721 | 419 | 284 | 3,222 | 1,254 |
| 1962 .... | 704 | 274 | 2,435 | 928 | 517 | 354 | 3,656 | 1,556 |
| 1963 .... | 815 | 328 | 2,771 | 1,081 | 584 | 381 | 4,170 | 1,790 |
| 1964 .... | 786 | 351 | 2,845 | 1,212 | 447 | 309 | 4,078 | 1,872 |
| 1965 .... | 1,364 | 767 | 4,385 | 2,467 | 480 | 385 | 6,229 | 3,619 |
| 1966 .... | 1,686 | 810 | 3,664 | 1,659 | 489 | 409 | 5,839 | 2,878 |
| 1967 .... | 1,677 | 1,058 | 2,737 | 1,675 | 450 | 388 | 4,864 | 3,121 |
| 1968 .... | 3,238 | 2,241 | 3,921 | 2,828 | 312 | 293 | 7,471 | 5,362 |
| 1969 .... | 3,811 | 2,628 | 4,653 | 3,325 | 309 | 347 | 8,773 | 6,300 |
| 1970 .... | 3,051 | 1,851 | 7,064 | 4,207 | 225 | 268 | 10,340 | 6,326 |
| 1971 .... | 3,418 | 2,932 | 5,293 | 4,581 | 224 | 309 | 8,935 | 7,822 |
| 1972 .... | 6,433 | 6,413 | 5,379 | 5,746 | 398 | 622 | 12,210 | 12,781 |
| 1973 .... | 5,622 | 5,748 | 5,572 | 5,936 | 233 | 397 | 11,427 | 12,081 |
| 1974 .... | 4,147 | 5,068 | 6,736 | 8,326 | 191 | 365 | 11,074 | 13,759 |
| 1975 .... | 2,319 | 3,026 | 5,089 | 6,837 | 201 | 429 | 7,609 | 10,292 |
| 1976 .... | 987 | 1,734 | 4,358 | 6,852 | 293 | 663 | 5,638 | 9,249 |
| 1977 .... | 1,501 | 2,526 | 4,843 | 7,899 | 251 | 607 | 6,595 | 11,032 |
| 1978 .... | 891 | 1,691 | 4,711 | 10,253 | 44 | 99 | 5,646 | 12,043 |
| 1979 .... | 840 | 1,783 | 6,988 | 13,409 | 289 | 883 | 8,117 | 16,075 |
| 1980 .... | 1,000 | 2,239 | 5,696 | 11,845 | 330 | 1,072 | 7,026 | 15,156 |
| 1981 .... | 880 | 2,211 | 5,014 | 12,319 | 408 | 1,376 | 6,302 | 15,906 |
| 1982 .... | 857 | 2,209 | 5,640 | 13,357 | 479 | 1,716 | 6,976 | 17,282 |
| 1983 .... | 654 | 1,654 | 3,663 | 9,093 | 484 | 1,835 | 4,801 | 12,582 |
| 1984 .... | 205 | 540 | 6,047 | 15,143 | 441 | 1,750 | 6,693 | 17,433 |
| 1985 .... | 295 | 776 | 5,445 | 13,127 | 439 | 1,902 | 6,179 | 15,805 |
| 1986 .... | 621 | 1,716 | 4,385 | 11,517 | 422 | 1,915 | 5,428 | 15,148 |
| 1987 .... | 569 | 2,066 | 5,514 | 19,892 | 445 | 2,118 | 6,528 | 24,076 |
| 1988 .... | 383 | 1,038 | 4,992 | 14,475 | 591 | 3,117 | 5,966 | 18,630 |
| 1989 .... | 472 | 1,506 | 6,002 | 17,227 | 375 | 2,040 | 6,849 | 20,773 |

(1) Data for 1978-1989 are preliminary. (2) Data excludes Hawaii.

(3) Data not available.

NOTE:--Data does not match previously published totals.

# HISTORICAL LOBSTER LANDINGS, BY SPECIES
## 1930 - 1989




NOTE:--Data does not include Hawaii.

## JOINT VENTURE CATCHES BY U.S.-FLAG VESSELS, BY SPECIES, 1982-1989

| Species | 1982 | | 1983 | | 1984 | | 1985 | |
|---|---|---|---|---|---|---|---|---|
| | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Alewives | - | - | - | - | 9 | 1 | - | - |
| Atka mackerel | 12,475 | 1,926 | 11,302 | 1,514 | 36,493 | 5,632 | 39,938 | 6,109 |
| Cod | 13,786 | 3,044 | 16,749 | 3,474 | 38,512 | 8,546 | 36,373 | 7,799 |
| Flounders | 26,649 | 3,997 | 36,958 | 5,287 | 54,372 | 7,605 | 179,663 | 24,833 |
| Hake, Pacific (whiting) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) |
| Ocean perch | 3 | 1 | 2,114 | 616 | 2,313 | 689 | 281 | 56 |
| Mackerel, Atlantic | (1) | (1) | (1) | (1) | 1,423 | 220 | 3,788 | 584 |
| Pollock, Alaska | 128,886 | 15,954 | 283,104 | 26,083 | 444,256 | 41,591 | 614,337 | 59,730 |
| Rockfishes | 30 | 7 | 311 | 94 | 346 | 105 | 70 | 14 |
| Sablefish | 124 | 4 | 363 | 141 | 871 | 396 | 94 | 30 |
| Whiting | (1) | (1) | (1) | (1) | (1) | (1) | - | - |
| Squid: | | | | | | | | |
| Illex | (1) | (1) | 8,344 | 1,840 | 6,010 | 2,000 | 2,540 | 595 |
| Loligo | (1) | (1) | 2,332 | 1,646 | 760 | 395 | 1,082 | 599 |
| Other fish (2) | 72,691 | 11,468 | 73,371 | 10,555 | 79,192 | 11,862 | 33,060 | 3,971 |
| *Total* | *254,644* | *36,401* | *434,948* | *51,250* | *664,557* | *79,042* | *911,226* | *104,320* |

| Species | 1986 | | 1987 | | 1988 | | 1989 | |
|---|---|---|---|---|---|---|---|---|
| | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars | Metric tons | Thousand dollars |
| Alewives | (1) | (1) | 22 | (3) | - | - | - | - |
| Atka mackerel | 31,991 | 4,828 | 30,030 | 4,775 | 19,619 | 3,571 | - | - |
| Cod | 66,015 | 14,449 | 59,521 | 15,334 | 111,526 | 30,429 | 44,424 | 12,495 |
| Flounders | 215,878 | 28,847 | 224,250 | 33,272 | 330,118 | 53,763 | 193,430 | 34,179 |
| Hake, Pacific (whiting) | 81,639 | 8,736 | 105,997 | 11,653 | 135,781 | 14,660 | 203,578 | 21,628 |
| Ocean perch | 273 | 72 | 556 | 173 | - | - | - | - |
| Mackerel, Atlantic | (1) | (1) | 8,012 | 1,058 | 5,685 | 760 | (1) | (1) |
| Pollock, Alaska | 904,111 | 95,294 | 1,057,315 | 134,302 | 826,564 | 116,102 | 287,755 | 40,378 |
| Rockfishes | 215 | 57 | 320 | 100 | 2,103 | 705 | - | - |
| Sablefish | 434 | 137 | 123 | 37 | 51 | 14 | - | - |
| Whiting | 65 | 9 | 5 | (3) | - | - | - | - |
| Squid: | | | | | | | | |
| Illex | (1) | (1) | 3,140 | 628 | (1) | (1) | - | - |
| Loligo | (1) | (1) | 993 | 745 | - | - | - | - |
| Other fish (2) | 9,766 | 2,470 | 510 | 56 | 20,738 | 1,086 | 42,061 | 3,485 |
| *Total* | *1,310,387* | *154,899* | *1,490,794* | *202,133* | *1,452,185* | *221,090* | *771,248* | *112,165* |

(1) Confidential data. (2) Includes alewives, Atlantic mackerel, butterfish, Pacific and red hakes, menhaden, sea herring, whiting, squid, and other miscellaneous fish unless shown separately. (3) Less than $500.

# U.S. MARINE RECREATIONAL FISHERIES

**DATA COLLECTION**. While data on commercial fisheries have been collected for many years, detailed statistical information on marine recreational fishing is also required to support a variety of fishery management and development purposes. These include the objectives of the Magnuson Fishery Conservation and Management Act, Public Law 94-265, as amended. However, the lack of a continuous or systematic collection of marine recreational fishery data had prevented the accomplishment of these goals. Therefore, NMFS began a new comprehensive Marine Recreational Fishery Statistical Survey (MRFSS) in 1979. Surveys have been conducted in the following areas and years:

Atlantic and Gulf, 1979 through 1989
Pacific, mid-1979 through 1989
Western Pacific, 1979 through 1981
Caribbean, 1979, 1981

Preliminary estimates of catch and trips from the MRFSS for the Atlantic, Gulf, and Pacific coasts for 1989 are presented in the following tables. Summary graphs for 1980-1989 catch and trips are also shown. The survey is being conducted in 1990 along the Atlantic and Gulf coasts.

These surveys consist of an intercept survey of fishermen in the field and an independent telephone survey of households. Each component survey provides certain information that is combined to produce estimates of recreational catch, fishing effort and participation. Estimates are generated by subregion or state, species, mode and area of fishing. In addition, information on catch rates and fish lengths and weights is obtained.

The MRFSS is only one of several NMFS efforts to obtain data on recreational fisheries. Specialized surveys on particular fisheries or to obtain socio-economic data are also conducted by NMFS.

**DATA TABLES**. The MRFSS catch data show the total number of fish caught for twenty frequently caught species groups in each survey area. Total number caught includes those fish brought ashore in whole form which were available for identification, weighing, and measuring as well as those not available for identification. This latter category includes those fish used for bait, discarded, filleted or released alive. Each fisheries group may contain one or more species, genera, or families.

Several tables show the distribution of total catch by subregion, fishing area and mode. The fishing areas are: ocean 3 miles or less from land, ocean more than 3 miles from land, and inland (sounds, river, bays). However, ocean data for the Gulf coast of Florida are reported as 10 miles or less from land and more than 10 miles from land.

The fishing modes are: shore (man-made structures and beach/bank from previous surveys), party/charter boat, and private/rental boat. However, in 1989 partyboats were not sampled by the MRFSS in the South Atlantic and Gulf subregions, so party/charter estimates include only charterboats in these areas.

The fishing trip tables indicate the estimated number of trips by coastal residents (generally residing within 25 miles of the coast), non-coastal residents of the subregion bordering saltwater, and non-residents. They also include the estimated number of trips by fishing mode.

The 1989 survey did not include Texas or the January and February period for South Carolina and the Atlantic coast states north of North Carolina. Pacific coast salmon fishing trips and catches were not included as a result of a cooperative arrangement with the Pacific coast states. These states had ongoing salmon data collection efforts which estimated a Pacific coast total salmon catch of approximately 763,300 fish in 1989. The data presented below will be finalized in separate marine recreational fishery reports to be published later this year.

**PRELIMINARY 1989 MRFSS DATA**. The U.S. marine recreational finfish catch in 1989 (excluding Alaska, Hawaii, and Pacific coast salmon) was an estimated 289.2 million fish. These fish weighed approximately 469.2 million pounds and were taken on an estimated 57.9 million fishing trips. The estimated number of U.S. marine recreational fishermen has been relatively stable over the last few years at 17 million.

The Atlantic and Gulf coasts accounted for approximately 86 percent of the total U.S. marine recreational finfish catch by number. Eighty-four percent of the estimated U.S. trips were made on the Atlantic and Gulf coasts.

Approximately 17 percent of the total U.S. catch by number was made in the Exclusive Economic Zone (EEZ), the principal area of NMFS management authority. However, for some species (e.g., red snapper) over 80 percent of the catch was made in the EEZ.

The private/rental boat mode accounted for 61 percent of the total U.S. marine recreational finfish catch in number. Shore mode catches were 25 percent of the total and party/charter catches (excluding South Atlantic and Gulf partyboats) were 14 percent of the total.

Atlantic and Gulf. In terms of number of fish, bluefish was the most frequently caught species on the Atlantic and Gulf coasts in 1989. Other frequently caught species in 1989 were spotted seatrout, spot and black sea bass. Top-ranked species in each subregion in 1989 were scup in the North Atlantic, bluefish in the Mid-Atlantic, spot in the South Atlantic, and spotted seatrout in the Gulf of Mexico. The Gulf (40 percent) and Mid-Atlantic (30 percent) subregions accounted for the highest numbers of Atlantic and Gulf coast fishes.

The inland, ocean 3 miles or less from shore, and ocean 10 miles or less from shore areas accounted for approximately 83 percent of the Atlantic and Gulf coasts catch in number. The remaining 17 percent of the catch in number was from the EEZ.

Sixty-four percent of the Atlantic and Gulf coast catch was taken in the private/rental boat mode in 1989. However, other modes were important for particular species such as king mackerel from the charter boat mode and kingfishes from the shore mode.

Coastal residents accounted for 73 percent of the Atlantic and Gulf trips made in 1989. Non-residents accounted for an additional 23 percent of the trips. Total trips in the South Atlantic exceeded all other subregions. This distribution of trips was similar to previous years.

Pacific. The catch in number of Pacific mackerel was the highest of any species on the Pacific coast in 1989. Top-ranked species groups in each subregion were Pacific mackerel in Southern California, rockfishes in Northern California, and surf smelt in Oregon and Washington. Southern California accounted for 56 percent of the Pacific coast catch in number.

The ocean 3 miles or less from shore area had the highest catch in number (57 percent) on the Pacific coast in 1989. The Pacific coast portion of the catch in the ocean more than 3 miles from shore (13 percent) was similar to the 17 percent for the Atlantic and Gulf coasts EEZ.

The overall catch among fishing modes was more evenly distributed on the Pacific coast than on the Atlantic and Gulf coasts. Percentage catches in number of fish were 44 percent for private/rental boats, 33 percent for shore, and 23 percent for party/charter boats.

The percentage of trips by coastal residents (90 percent) was higher on the Pacific coast than the Atlantic and Gulf coasts (73 percent). Forty-nine percent of the Pacific coast trips in 1989 were in the Southern California subregion. Considering that an additional 26 percent of the trips were made in the Northern California subregion, 75 percent of the non-salmon Pacific coast trips in 1989 were made in California.

# U.S. MARINE RECREATIONAL FISHERIES

## ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND SUBREGION: ATLANTIC AND GULF COASTS, JANUARY 1989 - DECEMBER 1989

| Species group | North Atlantic | Mid-Atlantic | South Atlantic | Gulf of Mexico | Total |
|---|---|---|---|---|---|
| | Thousands | | | | |
| Herrings | 377 | 256 | 964 | 12,316 | 13,913 |
| Saltwater catfishes | * | - | 1,545 | 8,876 | 10,449 |
| Black sea bass | 161 | 8,206 | 2,015 | 4,744 | 15,125 |
| Bluefish | 3,117 | 12,685 | 3,246 | 719 | 19,768 |
| Red snapper | * | * | 199 | 874 | 1,073 |
| Scup | 7,920 | 4,823 | - | * | 12,754 |
| Pinfish | * | 74 | 3,743 | 6,784 | 10,601 |
| Sheepshead | * | - | 701 | 2,564 | 3,270 |
| Spotted seatrout | * | 366 | 1,325 | 16,334 | 18,025 |
| Weakfish | * | 1,595 | 352 | * | 1,947 |
| Sand seatrout | * | * | * | 2,772 | 2,772 |
| Spot | * | 10,474 | 6,239 | 46 | 16,759 |
| Kingfishes | - | 78 | 1,847 | 944 | 2,871 |
| Atlantic croaker | * | 4,621 | 3,458 | 2,283 | 10,362 |
| Red drum | * | - | 527 | 3,182 | 3,738 |
| Mullets | * | - | 3,116 | 1,874 | 5,009 |
| King mackerel | * | - | 392 | 410 | 813 |
| Summer flounder | 187 | 2,244 | 390 | * | 2,822 |
| Winter flounder | 4,453 | 4,068 | * | * | 8,521 |
| Other fishes | 12,786 | 24,999 | 14,758 | 34,737 | 87,279 |
| *Total* | *29,003* | *74,581* | *44,828* | *99,459* | *247,871* |

NOTE:--A dash (-) denotes less than thirty thousand. However the number is included in row and column totals. An asterisk (*) denotes none reported. Figures for the Gulf of Mexico do not include the recreational catch for Texas. Figures for the South Atlantic and Gulf of Mexico do not include catches for partyboats. Row and column totals may not add due to rounding.

## ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND SUBREGION: PACIFIC COAST, JANUARY 1989 - DECEMBER 1989

| Species group | Southern California | Northern California | Oregon | Washington | Total |
|---|---|---|---|---|---|
| | Thousands | | | | |
| Pacific herring | - | - | 172 | 865 | 1,039 |
| Surf smelt | - | 389 | 624 | 2,428 | 3,442 |
| Smelts, other | - | * | - | - | - |
| Walleye pollock | * | * | * | - | - |
| Jacksmelt | 213 | 506 | - | * | 719 |
| Kelp bass | 1,489 | - | * | * | 1,491 |
| Barred sand bass | 2,285 | - | * | * | 2,285 |
| White croaker | 2,361 | 628 | * | * | 2,989 |
| Queenfish | 248 | * | * | * | 248 |
| Walleye surfperch | 49 | 114 | - | * | 191 |
| Redtail surfperch | - | - | - | * | 49 |
| Barred surfperch | 118 | 36 | * | * | 154 |
| Pacific bonito | 1,002 | * | * | * | 1,002 |
| Pacific mackerel | 4,587 | - | * | * | 4,596 |
| Black rockfish | - | 378 | 462 | - | 880 |
| Blue rockfish | 227 | 568 | 115 | - | 912 |
| Boccacio | 307 | 70 | - | * | 377 |
| Olive rockfish | 85 | 54 | * | * | 139 |
| Rockfishes, other | 2,099 | 2,201 | 135 | 1,230 | 5,665 |
| Other fishes | 7,916 | 3,519 | 1,467 | 2,177 | 15,079 |
| *Total* | *23,027* | *8,494* | *3,036* | *6,735* | *41,292* |

NOTE:--A dash (-) denotes less than thirty thousand. However, the number is included in row and column totals. An asterisk (*) denotes none reported. Figures do not include salmon catches estimated by state recreational surveys. Row and column totals may not add due to rounding.

## ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND AREA OF FISHING: ATLANTIC AND GULF COASTS, JANUARY 1989 - DECEMBER 1989

| Species group | Ocean | | | | Inland | All areas |
|---|---|---|---|---|---|---|
| | 3 Mi or less | Over 3 Mi | 10 Mi or less | Over 10 Mi | | |
| | Thousands | | | | | |
| Herrings | 709 | 122 | 4,708 | 96 | 8,278 | 13,913 |
| Saltwater catfishes | 1,590 | 296 | 1,846 | 190 | 6,526 | 10,449 |
| Black sea bass | 2,165 | 5,359 | 2,146 | 2,059 | 3,396 | 15,125 |
| Bluefish | 6,208 | 3,693 | 255 | 70 | 9,542 | 19,768 |
| Red snapper | 58 | 662 | 93 | 209 | 51 | 1,073 |
| Scup | 3,216 | 902 | * | * | 8,636 | 12,754 |
| Pinfish | 892 | 197 | 3,905 | 409 | 5,197 | 10,601 |
| Sheepshead | 407 | 93 | 831 | - | 1,935 | 3,270 |
| Spotted seatrout | 1,710 | 623 | 4,797 | 376 | 10,520 | 18,025 |
| Weakfish | 471 | 99 | * | * | 1,378 | 1,947 |
| Sand seatrout | 382 | 45 | 458 | - | 1,884 | 2,772 |
| Spot | 5,244 | 296 | * | * | 11,217 | 16,759 |
| Kingfishes | 1,175 | - | 474 | 41 | 1,169 | 2,871 |
| Atlantic croaker | 2,078 | 430 | 217 | - | 7,633 | 10,362 |
| Red drum | 512 | 57 | 517 | 58 | 2,594 | 3,738 |
| Mullets | 766 | 46 | 465 | * | 3,731 | 5,009 |
| King mackerel | 119 | 325 | 316 | 50 | - | 813 |
| Summer flounder | 1,230 | 121 | * | * | 1,470 | 2,822 |
| Winter flounder | 1,548 | 61 | * | * | 6,913 | 8,521 |
| Other fishes | 14,115 | 15,228 | 15,113 | 10,405 | 32,417 | 87,279 |
| *Total* | *44,595* | *28,667* | *36,141* | *13,974* | *124,490* | *247,871* |

Note:--"Ocean 0-10 mi or less" and "ocean over 10 mi " refers only to the Florida Gulf coast where state jurisdiction extends to three marine leagues, approximately ten nautical miles. The total ocean estimate is additive across the four areas. A dash (-) denotes less than thirty thousand. However the number is included in row and column totals. An asterisk (*) denotes none reported. Row and column totals may not add due to rounding.

## ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND AREA OF FISHING: PACIFIC COAST, JANUARY 1989 - DECEMBER 1989

| Species group | Ocean | | Inland | All areas |
|---|---|---|---|---|
| | 3 Mi or less | More than 3 Mi | | |
| | Thousands | | | |
| Pacific herring | - | * | 1,036 | 1,039 |
| Surf smelt | 395 | * | 3,048 | 3,442 |
| Smelts, other | - | * | - | - |
| Walleye pollock | * | * | - | - |
| Jacksmelt | 249 | * | 470 | 719 |
| Kelp bass | 1,115 | 371 | - | 1,491 |
| Barred sand bass | 2,088 | 190 | - | 2,285 |
| White croaker | 2,180 | 244 | 565 | 2,989 |
| Queenfish | 248 | * | * | 248 |
| Walleye surfperch | 116 | * | 75 | 191 |
| Redtail surfperch | 33 | * | - | 49 |
| Barred surfperch | 147 | * | - | 154 |
| Pacific bonito | 737 | 249 | - | 1,002 |
| Pacific mackerel | 3,925 | 647 | - | 4,596 |
| Black rockfish | 703 | 95 | 82 | 880 |
| Blue rockfish | 674 | 197 | 40 | 912 |
| Boccacio | 192 | 185 | * | 377 |
| Olive rockfish | 95 | 44 | - | 139 |
| Rockfishes, other | 2,636 | 1,946 | 1,082 | 5,665 |
| Other fishes | 8,108 | 1,393 | 5,578 | 15,079 |
| *Total* | *23,664* | *5,561* | *12,067* | *41,292* |

NOTE:--A dash (-) denotes less than thirty thousand. However, the number is included in row and column totals. An asterisk (*) denotes none reported. Figures do not include salmon catches estimated by state recreational surveys.

# U.S. MARINE RECREATIONAL FISHERIES

## ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND FISHING MODE: ATLANTIC AND GULF COASTS, JANUARY 1989 - DECEMBER 1989

| Species group | Shore | Party/ charter boats | Private/ rental boats | All modes |
|---|---|---|---|---|
| | Thousands | | | |
| Herrings | 7,022 | 207 | 6,684 | 13,913 |
| Saltwater catfishes | 2,237 | 204 | 8,008 | 10,449 |
| Black sea bass | 632 | 4,303 | 10,190 | 15,125 |
| Bluefish | 7,596 | 3,557 | 8,615 | 19,768 |
| Red snapper | 66 | 379 | 628 | 1,073 |
| Scup | 970 | 2,399 | 9,384 | 12,754 |
| Pinfish | 5,313 | 42 | 5,246 | 10,601 |
| Sheepshead | 936 | 265 | 2,069 | 3,270 |
| Spotted seatrout | 751 | 1,191 | 16,083 | 18,025 |
| Weakfish | 115 | 171 | 1,661 | 1,947 |
| Sand seatrout | 294 | 172 | 2,307 | 2,772 |
| Spot | 5,692 | 1,228 | 9,839 | 16,759 |
| Kingfishes | 1,451 | 40 | 1,380 | 2,871 |
| Atlantic croaker | 2,321 | 253 | 7,788 | 10,362 |
| Red drum | 472 | 267 | 2,999 | 3,738 |
| Mullets | 3,574 | - | 1,413 | 5,009 |
| King mackerel | 128 | 247 | 438 | 813 |
| Summer flounder | 341 | 285 | 2,196 | 2,822 |
| Winter flounder | 1,720 | 690 | 6,111 | 8,521 |
| Other fishes | 18,272 | 13,995 | 55,012 | 87,279 |
| *Total* | *59,904* | *29,916* | *158,051* | *247,871* |

Note:--A dash (-) denotes less than thirty thousand. However the number is included in row and column totals. An asterisk (*) denotes none reported.

## ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND FISHING MODE: PACIFIC COAST, JANUARY 1989 - DECEMBER 1989

| Species group | Shore | Party/ charter boats | Private/ rental boats | All modes |
|---|---|---|---|---|
| | Thousands | | | |
| Pacific herring | 591 | - | 447 | 1,039 |
| Surf smelt | 3,436 | * | - | 3,442 |
| Smelts, other | - | * | - | - |
| Walleye pollock | * | * | - | - |
| Jacksmelt | 688 | - | - | 719 |
| Kelp bass | 115 | 708 | 668 | 1,491 |
| Barred sand bass | 40 | 1,023 | 1,222 | 2,285 |
| White croaker | 933 | 210 | 1,846 | 2,989 |
| Queenfish | 245 | * | - | 248 |
| Walleye surfperch | 173 | * | - | 191 |
| Redtail surfperch | 44 | * | - | 49 |
| Barred surfperch | 148 | * | - | 154 |
| Pacific bonito | 107 | 334 | 560 | 1,002 |
| Pacific mackerel | 1,720 | 1,002 | 1,875 | 4,596 |
| Black rockfish | - | 395 | 456 | 880 |
| Blue rockfish | - | 402 | 484 | 912 |
| Boccacio | 91 | 252 | 34 | 377 |
| Olive rockfish | - | 105 | 32 | 139 |
| Rockfishes, other | 151 | 2,737 | 2,776 | 5,665 |
| Other fishes | 5,042 | 2,151 | 7,885 | 15,079 |
| *Total* | *13,603* | *9,328* | *18,361* | *41,292* |

NOTE:--A dash (-) denotes less than thirty thousand. However, the number is included in row and column totals. An asterisk (*) denotes none reported. Figures do not include salmon catches estimated by state recreational surveys.

## ESTIMATED NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL FISHERMEN BY SUBREGION AND AREA OF RESIDENCE - ATLANTIC, GULF AND PACIFIC COASTS, JANUARY 1989 - DECEMBER 1989

| Subregion | Trips by coastal residents | Trips by non-coastal residents | Non-resident trips | All trips |
|---|---|---|---|---|
| | Thousands | | | |
| North Atlantic..... | 4,133 | 353 | 1,321 | 5,808 |
| Mid-Atlantic..... | 10,411 | 334 | 2,801 | 13,545 |
| South Atlantic..... | 10,963 | 1,124 | 3,382 | 15,469 |
| Gulf of Mexico (1)..... | 9,843 | 378 | 3,454 | 13,676 |
| ***Total (2).....*** | ***35,350*** | ***2,190*** | ***10,958*** | ***48,498*** |
| Southern California.... | 4,272 | 55 | 319 | 4,645 |
| Northern California.... | 2,180 | 148 | 82 | 2,410 |
| Oregon..... | 702 | 32 | 125 | 859 |
| Washington..... | 1,391 | 52 | 89 | 1,532 |
| ***Total (3).....*** | ***8,545*** | ***286*** | ***615*** | ***9,446*** |
| ***Grand Total.....*** | ***43,895*** | ***2,476*** | ***11,573*** | ***57,944*** |

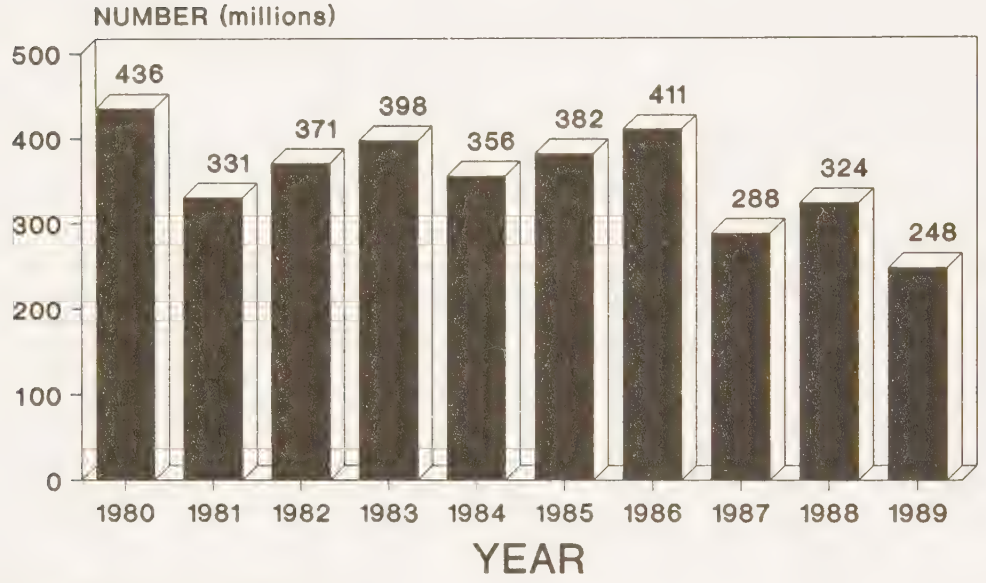
(1) Excludes Texas data.
(2) Excludes January/February trips from Maine thru Virginia and South Carolina and partyboat trips from the South Atlantic and Gulf subregions.
(3) Excludes Pacific Coast salmon fishing trips.
NOTE:--Row and column totals may not add due to rounding.

## ESTIMATED NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL FISHERMEN BY SUBREGION AND MODE OF FISHING - ATLANTIC, GULF AND PACIFIC COASTS, JANUARY 1989 - DECEMBER 1989

| Subregion | Shore | Party/ charter boat | Private/ rental boat | All modes |
|---|---|---|---|---|
| | Thousands | | | |
| North Atlantic..... | 1,806 | 726 | 3,276 | 5,808 |
| Mid-Atlantic..... | 4,015 | 2,011 | 7,520 | 13,545 |
| South Atlantic..... | 8,192 | 565 | 6,712 | 15,469 |
| Gulf of Mexico (1)..... | 5,296 | 569 | 7,811 | 13,676 |
| ***Total (2).....*** | ***19,309*** | ***3,871*** | ***25,319*** | ***48,498*** |
| Southern California.... | 1,852 | 1,134 | 1,660 | 4,645 |
| Northern California.... | 1,369 | 218 | 823 | 2,410 |
| Oregon..... | 354 | 114 | 391 | 859 |
| Washington..... | 440 | 117 | 974 | 1,532 |
| ***Total (3).....*** | ***4,015*** | ***1,583*** | ***3,848*** | ***9,446*** |
| ***Grand Total.....*** | ***23,324*** | ***5,454*** | ***29,167*** | ***57,944*** |

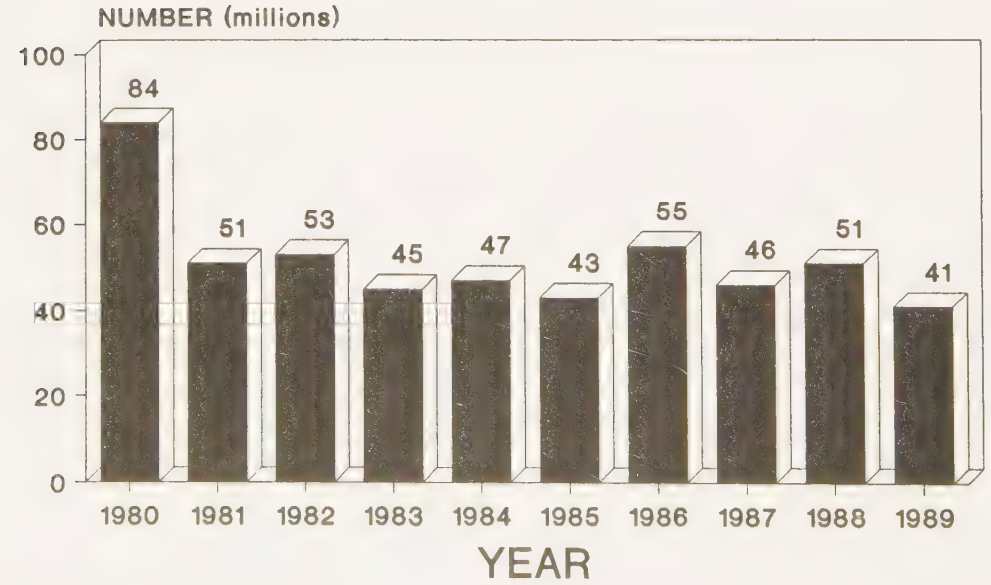
(1) Excludes Texas data.
(2) Excludes January/February trips from Maine thru Virginia and South Carolina and partyboat trips from the South Atlantic and Gulf subregions.
(3) Excludes Pacific Coast salmon fishing trips.
NOTE:--Row and column totals may not add due to rounding.

## MARINE RECREATIONAL FISHERIES CATCH
## ATLANTIC AND GULF COASTS
## 1980 - 1989



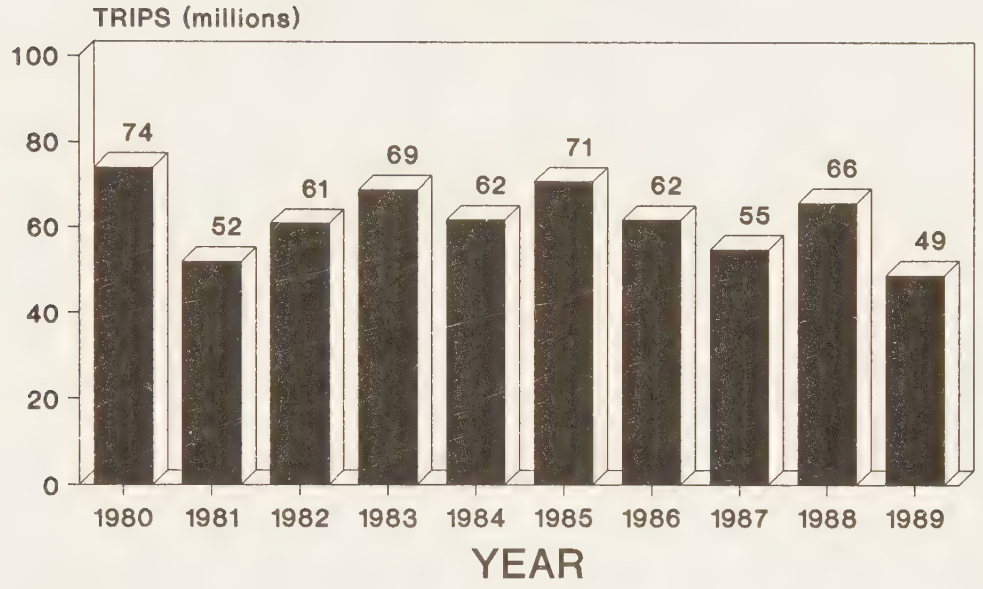

Note: 1989 data are preliminary.

## MARINE RECREATIONAL FISHERIES CATCH
## PACIFIC COAST
## 1980 - 1989



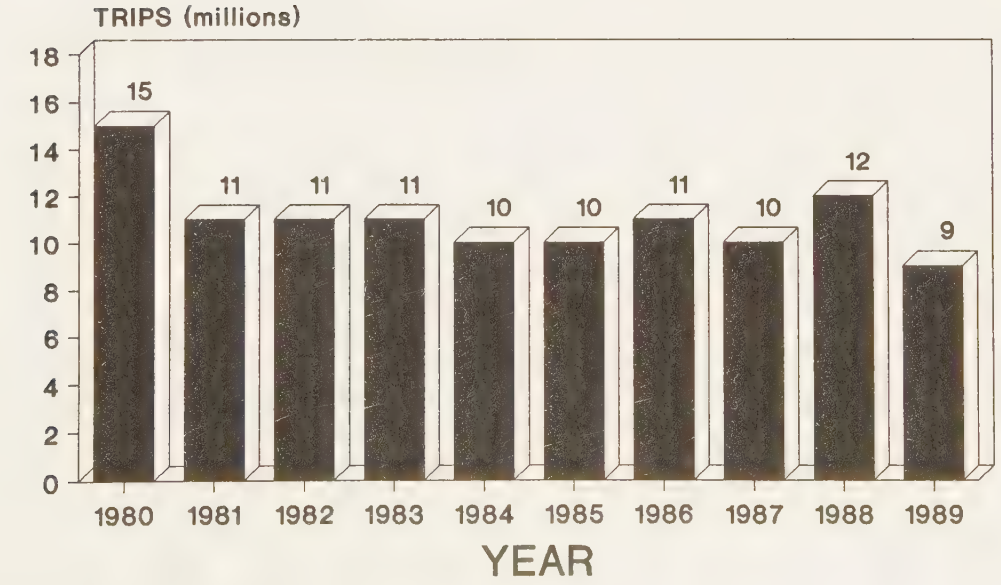

Note: 1989 data are preliminary.

## MARINE RECREATIONAL FISHING TRIPS
## ATLANTIC AND GULF COASTS
## 1980 - 1989



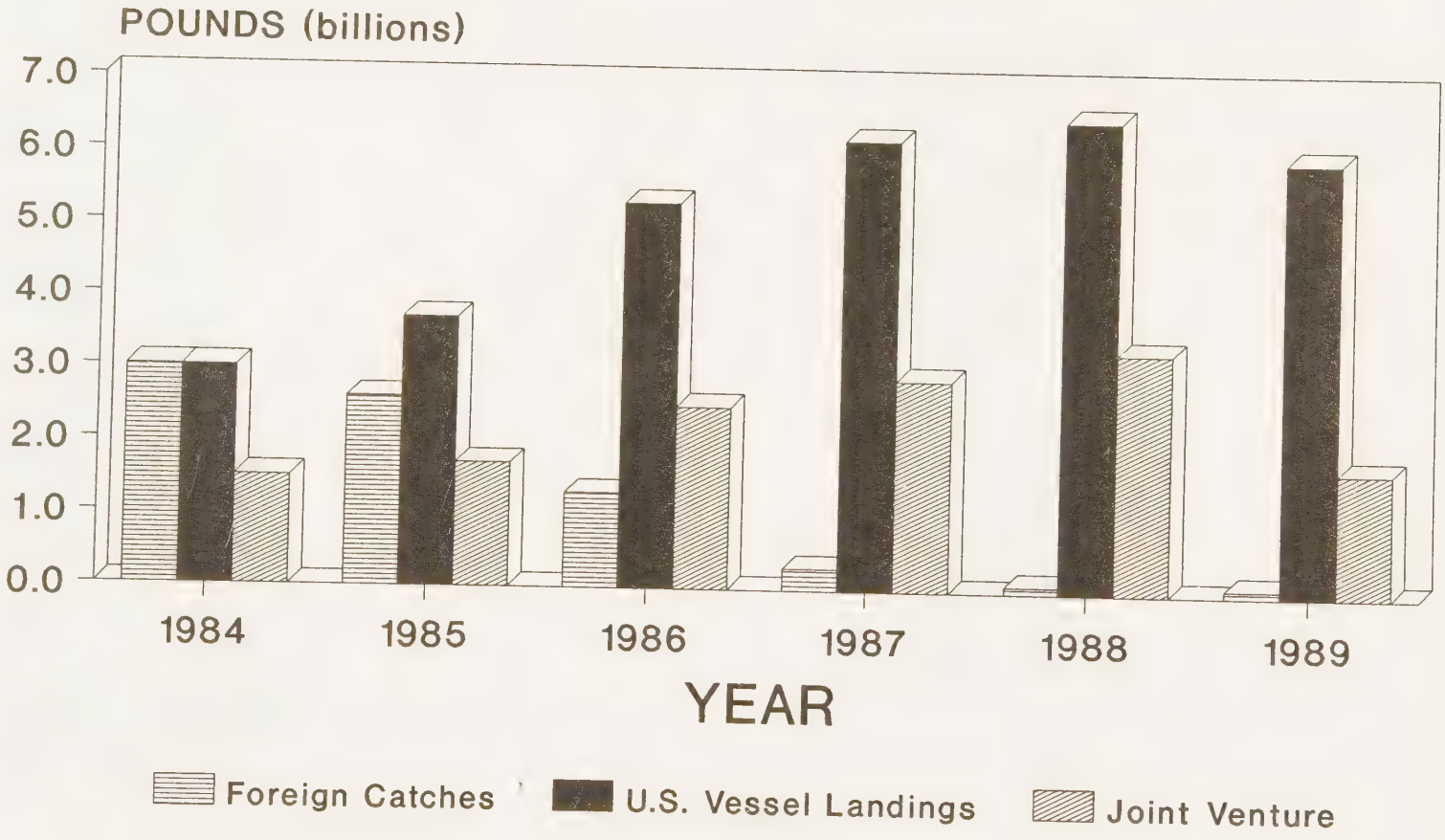

Note: 1989 data are preliminary.

## MARINE RECREATIONAL FISHING TRIPS
## PACIFIC COAST
## 1980 - 1989




Note: 1989 data are preliminary.

# COMMERCIAL CATCHES IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ) 1984 - 1989



## FOREIGN CATCH

### ALL FOREIGN COUNTRIES: CATCH IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ), BY COUNTRY, 1988 AND 1989

| Country | North Atlantic (1) | Washington, Oregon, and California | Alaska | | | Grand total |
|---|---|---|---|---|---|---|
| | | | Gulf of Alaska | Eastern Bering Sea and Aleutian Islands | Total Alaska | |
| | Metric tons, round weight | | | | | |
| 1989: | | | | | | |
| European Economic Community, Netherlands. | (2) | - | - | - | - | (2) |
| Other: | | | | | | |
| German Democratic Republic..... | 18,008.8 | - | - | - | - | 18,008.8 |
| Poland..... | 7,603.5 | - | - | - | - | 7,603.5 |
| USSR..... | 11,489.4 | - | - | 122.0 | 122.0 | 11,611.4 |
| *Grand Total.....* | *37,101.7* | - | - | *122.0* | *122.0* | *37,223.7* |
| 1988: | | | | | | |
| European Economic Community, Netherlands. | 12,381.3 | - | - | - | - | 12,381.3 |
| Other: | | | | | | |
| German Democratic Republic..... | 21,104.5 | - | - | - | - | 21,104.5 |
| Poland..... | 9,768.2 | 18,338.2 | - | - | - | 28,106.4 |
| *Grand Total.....* | *43,254.0* | *18,338.2* | - | - | - | *61,592.2* |

(1) Cape Hatteras, North Carolina, northward. (2) Included with USSR catch.

Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

## FOREIGN CATCH

### ALL FOREIGN COUNTRIES: CATCH IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ), BY SPECIES AND AREA, 1988 AND 1989

| Species | North Atlantic (1) | Washington, Oregon, and California | Alaska | | | Grand total |
|---|---|---|---|---|---|---|
| | | | Gulf of Alaska | Eastern Bering Sea and Aleutian Islands | Total Alaska | |
| | -Metric tons, round weight- | | | | | |
| **1989:** | | | | | | |
| Butterfish | 0.9 | - | - | - | - | 0.9 |
| Hake: | | | | | | |
| Atlantic: | | | | | | |
| Red | (2) | - | - | - | - | (2) |
| Silver (whiting) | 18.3 | - | - | - | - | 18.3 |
| Herrings, river (alewives) | 76.2 | - | - | - | - | 76.2 |
| Mackerel, Atlantic | 36,823.0 | - | - | - | - | 36,823.0 |
| Other finfish | 179.8 | - | - | - | - | 179.8 |
| *Total fish* | *37,098.2* | - | - | - | - | *37,098.2* |
| Snails (meats) | - | - | - | 122.0 | 122.0 | 122.0 |
| Squid, Atlantic: | | | | | | |
| Short-finned | (2) | - | - | - | - | (2) |
| Long-finned | 3.5 | - | - | - | - | 3.5 |
| *Total shellfish* | *3.5* | - | - | *122.0* | *122.0* | *125.5* |
| *Grand total* | *37,101.7* | - | - | *122.0* | *122.0* | *37,223.7* |
| **1988:** | | | | | | |
| Butterfish | (2) | - | - | - | - | (2) |
| Flounders, Pacific (flatfish) | - | 2.5 | - | - | - | 2.5 |
| Hake: | | | | | | |
| Atlantic: | | | | | | |
| Red | (2) | - | - | - | - | (2) |
| Silver (whiting) | 4.5 | - | - | - | - | 4.5 |
| Pacific (whiting) | - | 18,041.0 | - | - | - | 18,041.0 |
| Herrings, river (alewives) | 74.0 | - | - | - | - | 74.0 |
| Jack mackerel | - | 48.5 | - | - | - | 48.5 |
| Mackerel, Atlantic | 42,878.7 | - | - | - | - | 42,878.7 |
| Ocean perch, Pacific | - | 2.5 | - | - | - | 2.5 |
| Rockfishes | - | 149.1 | - | - | - | 149.1 |
| Sablefish | - | 26.9 | - | - | - | 26.9 |
| Other finfish | 293.4 | 67.7 | - | - | - | 361.1 |
| *Total fish* | *43,250.6* | *18,338.2* | - | - | - | *61,588.8* |
| Squid, Atlantic: | | | | | | |
| Short-finned | (2) | - | - | - | - | (2) |
| Long-finned | 3.4 | - | - | - | - | 3.4 |
| *Total shellfish* | *3.4* | - | - | - | - | *3.4* |
| *Grand total* | *43,254.0* | *18,338.2* | - | - | - | *61,592.2* |

(1) Cape Hatteras, North Carolina, northward. (2) Included with other finfish.

Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

## FOREIGN CATCH

### NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1987-89

| Country and species | 1987 | 1988 | 1989 |
|---|---|---|---|
| | Metric tons, round weight | | |
| European Economic Community: | | | |
| Italy: | | | |
| Hake, silver (whiting) | 3.1 | - | - |
| Mackerel, Atlantic | 15.1 | - | - |
| Other finfish | 14.7 | - | - |
| Squid, long-finned | 0.3 | - | - |
| *Total* | *33.2* | - | - |
| Netherlands: | | | |
| Butterfish | (1) | - | - |
| Hake, silver (whiting) | (1) | - | (2) |
| Herring, river (alewives) | 55.1 | 5.3 | (2) |
| Mackerel, Atlantic | 10,789.7 | 12,347.3 | (2) |
| Other finfish | 83.6 | 27.5 | (2) |
| Squid: Short-finned | - | - | (2) |
| Long-finned | (1) | 1.2 | (2) |
| *Total* | *10,928.4* | *12,381.3* | *(2)* |
| *Total, European Economic Community* | *10,961.6* | *12,381.3* | *(2)* |
| German Democratic Republic: | | | |
| Butterfish | (1) | (1) | 0.9 |
| Hake: | | | |
| Red | - | (1) | - |
| Silver (whiting) | (1) | 3.8 | 7.2 |
| Herring, river (alewives) | 26.4 | 28.3 | 22.2 |
| Mackerel, Atlantic | 18,488.9 | 20,909.9 | 17,909.8 |
| Other finfish | 38.0 | 161.1 | 67.1 |
| Squid: Short-finned | - | - | (1) |
| Long-finned | (1) | 1.4 | 1.6 |
| *Total* | *18,553.3* | *21,104.5* | *18,008.8* |
| Poland: | | | |
| Butterfish | - | (1) | (1) |
| Hake: Red | - | - | (1) |
| Silver (whiting) | - | 0.7 | 11.1 |
| Herring, river (alewives) | - | 40.4 | 28.0 |
| Mackerel, Atlantic | - | 9,621.5 | 7,499.1 |
| Other finfish | - | 104.8 | 63.4 |
| Squid, Long-finned | - | 0.8 | 1.9 |
| *Total* | - | *9,768.2* | *7,603.5* |
| USSR: | | | |
| Hake, silver (whiting) | - | - | (1) |
| Herring, river (alewives) | - | - | 26.0 |
| Mackerel, Atlantic | - | - | 11,414.1 |
| Other finfish | - | - | 49.3 |
| Squid: | | | |
| Short-finned | - | - | (1) |
| Long-finned | - | - | (1) |
| *Total* | - | - | *11,489.4* |
| *Grand total* | *29,514.9* | *43,254.0* | *37,101.7* |

(1) Included with other finfish. (2) Included with USSR catch.

Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

# U.S. EXCLUSIVE ECONOMIC ZONE

## FOREIGN CATCH

### WASHINGTON, OREGON, AND CALIFORNIA: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1987-89

| Country and species | 1987 | 1988 | 1989 |
|---|---|---|---|
| | Metric tons, round weight | | |
| China: | | | |
| Hake, Pacific (whiting) | 4.9 | - | - |
| Jack mackerel | 0.1 | - | - |
| *Total* | *5.0* | - | - |
| Poland: | | | |
| Flounders (flatfish) | 1.0 | 2.5 | - |
| Hake, Pacific (whiting) | 48,277.6 | 18,041.0 | - |
| Jack mackerel | 308.7 | 48.5 | - |
| Ocean perch, Pacific | 3.3 | 2.5 | - |
| Rockfishes | 202.4 | 149.1 | - |
| Sablefish | 29.7 | 26.9 | - |
| Other finfishes | 152.7 | 67.7 | - |
| *Total* | *48,975.4* | *18,338.2* | - |
| Republic of Korea: | | | |
| Flounders (flatfish) | 0.6 | - | - |
| Hake, Pacific (whiting) | 1,373.2 | - | - |
| Jack mackerel | 11.8 | - | - |
| Rockfishes | 16.4 | - | - |
| Other finfishes | 10.7 | - | - |
| *Total* | *1,412.7* | - | - |
| *Grand total* | *50,393.1* | *18,338.2* | - |

Note:--Excludes tunas and prohibited species. Catches are for calendar year only.

### EASTERN BERING SEA AND ALEUTIAN ISLANDS: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1987-89

| Country and species | 1987 | 1988 | 1989 |
|---|---|---|---|
| | Metric tons, round weight | | |
| Japan: | | | |
| Atka mackerel | 0.3 | - | - |
| Cod, Pacific | 54,145.6 | - | - |
| Flounders (1) | 6,407.6 | - | - |
| Ocean perch, Pacific | 5.1 | - | - |
| Pollock, Alaska | 3,283.2 | - | - |
| Rockfishes | 7.3 | - | - |
| Sablefish | 32.7 | - | - |
| Other finfish | 2,578.6 | - | - |
| Snails (meats) | 881.6 | - | - |
| Squid, unclassified | 94.5 | - | - |
| *Total* | *67,436.5* | - | - |
| Republic of Korea: | | | |
| Atka mackerel | - | - | - |
| Cod, Pacific | 228.2 | - | - |
| Flounders (1) | 1,022.2 | - | - |
| Ocean perch, Pacific | 0.1 | - | - |
| Pollock, Alaska | 312.7 | - | - |
| Rockfishes | - | - | - |
| Sablefish | 0.1 | - | - |
| Other finfish | 51.1 | - | - |
| Squid, unclassified | - | - | - |
| *Total* | *1,614.4* | - | - |
| USSR, Snail (meats) | - | - | 122.0 |
| *Grand total* | *69,050.9* | - | *122.0* |

(1) May include yellowfin sole.
Note:--Excludes tunas and prohibited species. Catches are for calendar year only.

## U.S. AND WORLD COMMERCIAL FISH CATCHES, 1953-88

| Year | U.S. commercial catch and exvessel value | | | World commercial catch | | | | |
|---|---|---|---|---|---|---|---|---|
| | Published by U.S. (excludes weight of mollusk shells) | Published by FAO (1) | Exvessel value | Freshwater | Marine | | | Grand total |
| | | | | | Peruvian anchovy | Other (2) | Total | |
| | Million metric tons Live weight | | Billion dollars | Million metric tons Live weight | | | | |
| 1953.... | 2.0 | 2.7 | 0.4 | 3.0 | 0.0 | 22.9 | 22.9 | 25.9 |
| 1954.... | 2.2 | 2.8 | 0.4 | 3.2 | 0.0 | 24.4 | 24.4 | 27.6 |
| 1955.... | 2.2 | 2.8 | 0.3 | 3.4 | 0.0 | 25.5 | 25.5 | 28.9 |
| 1956.... | 2.4 | 3.0 | 0.4 | 3.5 | 0.1 | 27.2 | 27.3 | 30.8 |
| 1957.... | 2.2 | 2.8 | 0.4 | 3.9 | 0.3 | 27.5 | 27.8 | 31.7 |
| 1958.... | 2.2 | 2.7 | 0.4 | 4.5 | 0.8 | 28.0 | 28.8 | 33.3 |
| 1959.... | 2.3 | 2.9 | 0.4 | 5.1 | 2.0 | 29.8 | 31.8 | 36.9 |
| 1960.... | 2.2 | 2.8 | 0.4 | 5.6 | 3.5 | 31.1 | 34.6 | 40.2 |
| 1961.... | 2.4 | 2.9 | 0.4 | 5.7 | 5.3 | 32.6 | 37.9 | 43.6 |
| 1962.... | 2.4 | 3.0 | 0.4 | 5.8 | 7.1 | 31.9 | 39.0 | 44.8 |
| 1963.... | 2.2 | 2.8 | 0.4 | 5.9 | 7.2 | 33.5 | 40.7 | 46.6 |
| 1964.... | 2.1 | 2.6 | 0.4 | 6.2 | 9.8 | 35.9 | 45.7 | 51.9 |
| 1965.... | 2.2 | 2.7 | 0.4 | 7.0 | 7.7 | 38.5 | 46.2 | 53.2 |
| 1966.... | 1.9 | 2.5 | 0.5 | 7.3 | 9.6 | 40.4 | 50.0 | 57.3 |
| 1967.... | 1.8 | 2.4 | 0.4 | 7.2 | 10.5 | 42.7 | 53.2 | 60.4 |
| 1968.... | 1.9 | 2.5 | 0.5 | 7.4 | 11.3 | 45.2 | 56.5 | 63.9 |
| 1969.... | 1.9 | 2.5 | 0.5 | 7.6 | 9.7 | 45.4 | 55.1 | 62.7 |
| 1970.... | 2.2 | 2.8 | 0.6 | 8.4 | 13.1 | 46.6 | 59.7 | 65.6 |
| 1971.... | 2.3 | 2.9 | 0.7 | 9.0 | 11.2 | 48.3 | 59.5 | 66.1 |
| 1972.... | 2.2 | 2.8 | 0.7 | 5.7 | 4.8 | 53.7 | 58.5 | 62.0 |
| 1973.... | 2.2 | 2.8 | 0.9 | 5.7 | 1.7 | 55.3 | 57.0 | 62.7 |
| 1974.... | 2.3 | 2.8 | 0.9 | 5.8 | 4.0 | 56.7 | 60.7 | 66.5 |
| 1975.... | 2.2 | 2.8 | 1.0 | 6.2 | 3.3 | 56.9 | 60.2 | 66.4 |
| 1976.... | 2.4 | 3.0 | 1.3 | 5.9 | 4.3 | 59.6 | 63.9 | 69.8 |
| 1977.... | 2.4 | 3.0 | 1.5 | 6.1 | 0.8 | 62.0 | 62.8 | 68.9 |
| 1978.... | 2.7 | 3.4 | 1.9 | 5.8 | 1.2 | 63.6 | 64.8 | 70.6 |
| 1979.... | 2.8 | 3.5 | 2.2 | 5.9 | 1.4 | 63.8 | 65.2 | 71.1 |
| 1980.... | 2.9 | 3.6 | 2.2 | 6.2 | 0.7 | 65.1 | 65.8 | 72.0 |
| 1981.... | 2.7 | 3.8 | 2.4 | 6.6 | 1.2 | 67.0 | 68.2 | 74.8 |
| 1982.... | 2.9 | 4.0 | 2.4 | 8.5 | 1.8 | 66.9 | 68.7 | 77.2 |
| 1983.... | 2.9 | 4.3 | 2.4 | 9.3 | 0.1 | 68.2 | 68.3 | 77.6 |
| 1984.... | 2.9 | 5.0 | 2.3 | 10.0 | 0.1 | 73.8 | 73.9 | 83.9 |
| 1985.... | 2.8 | 5.0 | 2.3 | 10.7 | 1.0 | 74.6 | 75.6 | 86.3 |
| 1986.... | 2.7 | 5.2 | 2.8 | 11.8 | 4.9 | 76.0 | 80.9 | 92.7 |
| 1987.... | 3.1 | 6.0 | 3.1 | 13.1 | 2.1 | 78.6 | 80.7 | 93.8 |
| 1988.... | 3.3 | 6.0 | 3.5 | 13.8 | 3.6 | 81.0 | 84.6 | 98.4 |

(1) Includes U.S.-flag vessel landings at foreign ports, transfer of catches onto foreign vessels within the U.S. EEZ (joint ventures), and the weight of mollusk shells. (2) Includes diadromous fishes including salmon and other anadromous fishes and catadromous fishes such as eels.

Note:--There are 2,204.6 pounds in a metric ton. Prior to 1970, the world commercial catch of whales and seals is excluded. For the years 1970-1988, data for marine mammals and aquatic plants are excluded. There is a revision in the total world commercial catch back to 1970 as published in FAO Yearbook of Fishery Statistics, Vol. 48 and 50. However, prior to 1974, data on freshwater and marine catches were not revised. Therefore, for the years 1970 to 1973, data will not add to the grand total.

Source:--Fishery Statistics of the United States; Fisheries of the United States; Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, Rome; various issues.

## WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY COUNTRIES, 1984-88
## (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

| Country | 1984(1) | 1985(1) | 1986(1) | 1987(1) | 1988 |
|---|---|---|---|---|---|
| | Thousand metric tons Live weight | | | | |
| Japan | 12,021 | 11,409 | 11,976 | 11,849 | 11,897 |
| USSR | 10,593 | 10,523 | 11,260 | 11,160 | 11,332 |
| China | 5,927 | 6,779 | 8,000 | 9,346 | 10,359 |
| Peru | 3,317 | 4,136 | 5,614 | 4,584 | 6,637 |
| United States (2) | 5,010 | 4,970 | 5,195 | 6,021 | 6,028 |
| Chile | 4,499 | 4,804 | 5,572 | 4,815 | 5,210 |
| India | 2,864 | 2,826 | 2,923 | 2,908 | 3,146 |
| Republic of Korea | 2,477 | 2,650 | 3,103 | 2,876 | 2,727 |
| Indonesia | 2,252 | 2,333 | 2,457 | 2,605 | 2,718 |
| Thailand | 2,135 | 2,225 | 2,536 | 2,204 | 2,353 |
| Philippines | 1,934 | 1,865 | 1,916 | 1,989 | 2,042 |
| Denmark | 1,848 | 1,765 | 1,849 | 1,706 | 1,972 |
| Norway | 2,466 | 2,119 | 1,914 | 1,949 | 1,826 |
| Iceland | 1,535 | 1,680 | 1,659 | 1,633 | 1,759 |
| Korea (3) | 1,650 | 1,700 | 1,700 | 1,700 | 1,700 |
| Canada | 1,284 | 1,453 | 1,510 | 1,562 | 1,597 |
| Spain | 1,441 | 1,483 | 1,434 | 1,393 | 1,430 |
| Mexico | 1,104 | 1,226 | 1,305 | 1,419 | 1,363 |
| South Africa | 734 | 775 | 819 | 1,424 | 1,298 |
| United Kingdom | 836 | 891 | 850 | 944 | 938 |
| France | 770 | 838 | 871 | 861 | 898 |
| Vietnam | 776 | 808 | 825 | 871 | 874 |
| Bangladesh | 756 | 776 | 797 | 817 | 829 |
| Ecuador | 883 | 1,087 | 1,003 | 680 | 769 |
| Brazil | 835 | 838 | 794 | 733 | 750 |
| Burma | 610 | 644 | 687 | 686 | 705 |
| Poland | 719 | 683 | 645 | 671 | 655 |
| Turkey | 567 | 578 | 583 | 628 | 628 |
| Malaysia | 670 | 639 | 621 | 612 | 604 |
| Italy | 578 | 589 | 568 | 560 | 559 |
| Morocco | 467 | 473 | 595 | 491 | 551 |
| New Zealand | 322 | 305 | 345 | 431 | 503 |
| Argentina | 315 | 406 | 420 | 559 | 491 |
| Pakistan | 372 | 408 | 416 | 428 | 445 |
| Venezuela | 259 | 265 | 284 | 459 | 444 |
| Netherlands | 432 | 504 | 455 | 446 | 399 |
| Ghana | 270 | 276 | 321 | 382 | 361 |
| All others | 8,336 | 8,572 | 8,846 | 9,374 | 9,586 |
| ***Total*** | ***83,864*** | ***86,301*** | ***92,668*** | ***93,776*** | ***98,383*** |

(1) Revised.

(2) Includes the weight of clam, oyster, scallop, and other mollusk shells. This weight is not included in U.S. landings statistics shown elsewhere.

(3) Data estimated by FAO.

Note:--Statistics for mariculture, aquaculture, and other kinds of fish farming, etc., except for the United States are included in country totals. Statistics on quantities caught by recreational fishermen are excluded.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1988, Vol. 66, Rome.

## WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY CONTINENT, 1984-88 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

| Continent | 1984(1) | 1985(1) | 1986(1) | 1987(1) | 1988 |
|---|---|---|---|---|---|
| | Thousand metric tons Live weight | | | | |
| Asia..... | 37,033 | 37,740 | 40,755 | 41,954 | 43,662 |
| South America..... | 10,376 | 11,807 | 13,976 | 12,209 | 14,659 |
| Europe..... | 13,126 | 12,944 | 12,725 | 12,635 | 12,874 |
| USSR..... | 10,593 | 10,523 | 11,260 | 11,160 | 11,332 |
| North and Central America.. | 7,958 | 8,397 | 8,656 | 9,665 | 9,637 |
| Africa..... | 4,117 | 4,249 | 4,576 | 5,314 | 5,302 |
| Oceania..... | 661 | 641 | 720 | 839 | 917 |
| *Total.....* | *83,864* | *86,301* | *92,668* | *93,776* | *98,383* |

(1) Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1988, Vol. 66, Rome.

## WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY MAJOR FISHING AREAS, 1984-1988 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

| Area | 1984(1) | 1985(1) | 1986(1) | 1987(1) | 1988 |
|---|---|---|---|---|---|
| | Thousand metric tons Live weight | | | | |
| Marine Areas: | | | | | |
| Pacific Ocean and adjacent areas..... | 43,596 | 45,667 | 50,749 | 49,285 | 52,867 |
| Atlantic Ocean and adjacent areas..... | 25,319 | 24,952 | 24,907 | 26,156 | 26,152 |
| Indian Ocean and adjacent areas..... | 4,885 | 4,939 | 5,188 | 5,252 | 5,546 |
| *Total.....* | *73,800* | *75,558* | *80,844* | *80,693* | *84,565* |
| Inland waters: | | | | | |
| Asia..... | 6,401 | 7,021 | 7,840 | 8,581 | 9,208 |
| Africa..... | 1,538 | 1,553 | 1,679 | 1,782 | 1,834 |
| USSR..... | 881 | 906 | 927 | 988 | 996 |
| North and Central America | 453 | 464 | 512 | 607 | 632 |
| South America.... | 337 | 328 | 361 | 625 | 614 |
| Europe..... | 413 | 430 | 460 | 449 | 484 |
| Oceania..... | 41 | 41 | 45 | 51 | 50 |
| *Total.....* | *10,064* | *10,743* | *11,824* | *13,083* | *13,818* |
| *Grand total...* | *83,864* | *86,301* | *92,668* | *93,776* | *98,383* |

(1) Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1988, Vol. 66, Rome.

## WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY SPECIES GROUPS, 1984-88, (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

| Species group | 1984(1) | 1985(1) | 1986(1) | 1987(1) | 1988 |
|---|---|---|---|---|---|
| | Thousand metric tons Live weight | | | | |
| Herring, sardines, anchovies, etc. | 19,607 | 21,101 | 23,955 | 22,300 | 24,098 |
| Cods, hakes, haddocks, etc. | 12,259 | 12,456 | 13,541 | 13,774 | 13,624 |
| Freshwater fishes | 8,078 | 8,784 | 9,764 | 10,488 | 11,181 |
| Miscellaneous marine and diadromous fishes | 8,693 | 8,922 | 9,539 | 9,608 | 10,205 |
| Jacks, mullets, sauries, etc. | 8,817 | 8,315 | 7,424 | 8,248 | 9,022 |
| Mollusks | 6,367 | 6,445 | 6,570 | 7,566 | 7,772 |
| Redfish, basses, congers, etc. | 5,428 | 5,215 | 5,970 | 5,676 | 5,652 |
| Crustaceans | 3,344 | 3,670 | 4,079 | 4,252 | 4,458 |
| Mackerel, snoeks, cutlassfishes, etc. | 4,269 | 3,829 | 4,010 | 3,611 | 3,870 |
| Tunas, bonitos, billfishes, etc. | 3,102 | 3,183 | 3,431 | 3,540 | 3,783 |
| Flounders, halibuts, soles, etc. | 1,190 | 1,351 | 1,316 | 1,289 | 1,349 |
| Salmons, trouts, smelts, etc. | 956 | 1,169 | 1,090 | 1,084 | 1,152 |
| Shads, milkfishes, etc. | 739 | 773 | 776 | 805 | 684 |
| Sharks, rays, chimaeras, etc. | 598 | 620 | 627 | 659 | 672 |
| River eels | 98 | 99 | 95 | 103 | 115 |
| Sturgeons, paddlefishes, etc. | 27 | 26 | 25 | 24 | 21 |
| Miscellaneous | 292 | 343 | 406 | 749 | 725 |
| *Total* | *83,864* | *86,301* | *92,618* | *93,776* | *98,383* |

(1) Revised.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1988, Vol. 66, Rome.

## DISPOSITION OF WORLD COMMERCIAL CATCH, 1984-1988 (DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

| Item | 1984(1) | 1985(1) | 1986(1) | 1987(1) | 1988 |
|---|---|---|---|---|---|
| | Percent of total | | | | |
| Marketed fresh | 17.8 | 18.6 | 19.4 | 20.3 | 21.6 |
| Frozen | 24.3 | 23.9 | 23.6 | 23.8 | 23.3 |
| Canned | 13.9 | 13.3 | 12.5 | 12.5 | 12.1 |
| Cured | 14.5 | 14.8 | 14.2 | 14.7 | 14.1 |
| Reduced to meal and oil (2) | 28.2 | 27.9 | 29.0 | 27.4 | 27.6 |
| Miscellaneous purposes | 1.3 | 1.5 | 1.3 | 1.3 | 1.3 |
| *Total* | *100.0* | *100.0* | *100.0* | *100.0* | *100.0* |

(1) Revised.

(2) Only whole fish destined for the manufacture of oils and meals are included. Raw material for reduction derived from fish primarily destined for marketing fresh, frozen, canned, cured, and miscellaneous purposes is excluded; such waste quantities are included under the other disposition channels.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1988, Vol. 67, Rome.

## WORLD IMPORTS AND EXPORTS OF SEVEN FISHERY COMMODITY GROUPS, BY LEADING COUNTRIES, 1985-88

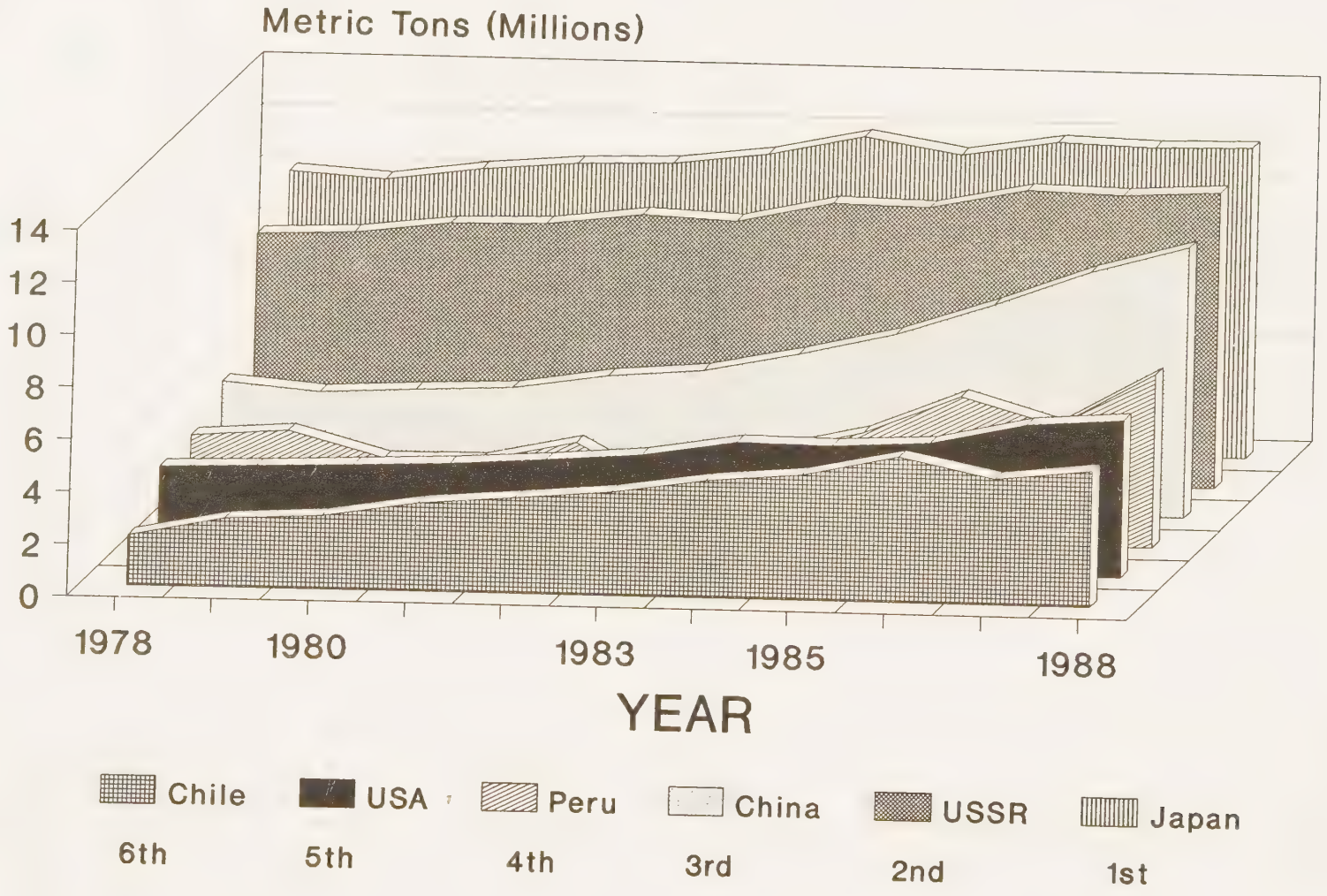
| Country | 1985 (1) | 1986 (1) | 1987 (1) | 1988 |
|---|---|---|---|---|
| | Thousand U.S. dollars | | | |
| ***IMPORTS*** | | | | |
| Japan | 4,744,277 | 6,593,515 | 8,308,077 | 10,657,567 |
| United States | 4,051,794 | 4,748,692 | 5,662,329 | 5,389,345 |
| France | 1,039,848 | 1,510,431 | 2,021,868 | 2,234,085 |
| Italy | 984,990 | 1,264,513 | 1,738,226 | 1,894,060 |
| Spain | 412,144 | 721,941 | 1,321,771 | 1,715,725 |
| United Kingdom | 940,598 | 1,216,053 | 1,386,818 | 1,576,799 |
| Fed. Rep. of Germany | 818,616 | 1,112,060 | 1,268,965 | 1,411,166 |
| Hong Kong | 470,293 | 622,984 | 792,062 | 1,029,723 |
| Denmark | 370,442 | 596,060 | 842,476 | 851,726 |
| Canada | 355,939 | 433,087 | 511,901 | 593,388 |
| Belgium | 304,024 | 425,923 | 529,941 | 582,893 |
| Netherlands | 308,449 | 387,935 | 509,430 | 577,894 |
| Thailand | 138,312 | 283,658 | 267,149 | 537,918 |
| Portugal | 201,976 | 256,373 | 424,716 | 457,133 |
| Sweden | 245,222 | 333,934 | 404,897 | 418,409 |
| Taiwan | 190,704 | 197,827 | 308,247 | 403,227 |
| Singapore | 204,376 | 257,666 | 312,955 | 370,311 |
| Switzerland | 193,347 | 264,921 | 332,826 | 362,960 |
| Republic of Korea | 89,775 | 117,079 | 212,497 | 314,967 |
| Other Countries | 2,537,767 | 2,881,196 | 3,364,751 | 3,867,821 |
| ***Total*** | ***18,602,893*** | ***24,225,848*** | ***30,521,902*** | ***35,247,117*** |
| ***EXPORTS*** | | | | |
| United States | 1,162,372 | 1,480,990 | 1,824,788 | 2,441,176 |
| Canada | 1,359,248 | 1,751,809 | 2,092,170 | 2,206,652 |
| Denmark | 952,712 | 1,381,460 | 1,750,652 | 1,854,473 |
| Republic of Korea | 796,878 | 1,171,111 | 1,505,697 | 1,784,068 |
| Taiwan | 956,452 | 1,374,723 | 1,742,028 | 1,694,699 |
| Thailand | 675,063 | 1,011,896 | 1,261,066 | 1,630,891 |
| Norway | 922,460 | 1,171,170 | 1,474,930 | 1,608,071 |
| China | 366,506 | 645,164 | 911,654 | 1,361,945 |
| Iceland | 617,355 | 857,994 | 1,071,067 | 1,059,294 |
| Japan | 819,840 | 897,851 | 889,828 | 1,037,318 |
| Netherlands | 543,666 | 766,379 | 953,177 | 948,153 |
| Chile | 438,627 | 516,023 | 635,583 | 804,746 |
| USSR | 383,908 | 587,080 | 637,287 | 799,633 |
| Hong Kong | 298,716 | 416,760 | 501,173 | 732,204 |
| France | 359,000 | 501,233 | 654,464 | 728,491 |
| United Kingdom | 362,296 | 511,130 | 717,418 | 710,161 |
| Indonesia | 236,620 | 340,619 | 441,079 | 664,483 |
| Spain | 353,767 | 398,703 | 474,752 | 650,542 |
| Australia | 311,856 | 340,877 | 398,842 | 534,134 |
| Other Countries | 5,464,436 | 6,950,371 | 8,190,188 | 8,936,262 |
| ***Total*** | ***17,381,778*** | ***23,073,343*** | ***28,127,843*** | ***32,187,396*** |

(1) Revised.

Note:--Data on imports and exports cover the international trade of 176 countries or areas. The total value of exports is consistently less than the total value of imports, probably because charges for insurance, freight, and similar expenses were included in the import value but not in in the export value. The seven fishery commodity groups covered by this table are: 1. Fish, fresh, chilled or frozen; 2. Fish, dried, salted, or smoked; 3. Crustaceans and mollusks, fresh, dried, salted,, etc.; 4. Fish products and preparations, whether or not in airtight containers; 5. Crustacean and mollusk products and preparations, whether or not in airtight containers; and 6. Oils and fats, crude or refined, of aquatic animal origin; and 7. Meals solubles, and similar animal foodstuffs of aquatic animal origin.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1988, Vol. 67, Rome.

# WORLD COMMERCIAL CATCH BY LEADING COUNTRIES 1978 - 1988



## VALUE OF PROCESSED FISHERY PRODUCTS, 1988 AND 1989

(Processed from domestic catch and imported products)

| Item | 1988(1) | | 1989(2) | |
|---|---|---|---|---|
| | Thousand dollars | Percent of total | Thousand dollars | Percent of total |
| Edible: | | | | |
| Fresh and frozen..... | 3,987,004 | 68.4 | 4,516,984 | 65.6 |
| Canned..... | 1,388,067 | 23.8 | 1,753,536 | 25.5 |
| Cured..... | 125,671 | 2.2 | 174,282 | 2.5 |
| *Total edible.....* | *5,500,742* | *94.4* | *6,444,802* | *93.5* |
| Industrial: | | | | |
| Bait and animal food (canned)..... | 92,722 | 1.6 | 238,343 | 3.5 |
| Meal, oil, and solubles..... | 188,843 | 3.2 | 156,321 | 2.3 |
| Other..... | 46,737 | 0.8 | 49,756 | 0.7 |
| *Total industrial.* | *328,302* | *5.6* | *444,420* | *6.5* |
| *Grand total.....* | *5,829,044* | *100.0* | *6,889,222* | *100.0* |

(1) Revised.
(2) Preliminary. May not add due to rounding.

Note:--Value is based on selling price at the plant. Processed Fishery Products, Annual Summary, 1989, Current Fishery Statistics No. 8903 will provide additional information.

# FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP, 1980-89

## U.S. PRODUCTION OF FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP, 1980-89

| YEAR | Fish sticks | | Fish portions | | Breaded shrimp | |
|---|---|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| 1980..... | 88,429 | 88,762 | 344,249 | 388,430 | 83,182 | 254,283 |
| 1981..... | 88,972 | 96,754 | 328,407 | 388,722 | 85,177 | 282,026 |
| 1982..... | 91,178 | 105,516 | 304,104 | 385,894 | 94,391 | 337,604 |
| 1983..... | 86,928 | 115,556 | 335,270 | 410,858 | 100,106 | 386,222 |
| 1984..... | 92,441 | 109,677 | 333,212 | 413,789 | 94,522 | 369,415 |
| 1985..... | 96,239 | 111,265 | 330,362 | 367,734 | 95,734 | 354,808 |
| 1986..... | 87,289 | 94,290 | 341,628 | 393,956 | 107,834 | 358,442 |
| 1987..... | 98,927 | *142,946 | 323,746 | *445,631 | 108,937 | 371,798 |
| 1988..... | 80,148 | 113,868 | 301,229 | 438,873 | 99,471 | 292,899 |
| 1989..... | 89,112 | 116,440 | 279,777 | 400,289 | *120,950 | *404,592 |

(1) *Record. Records--1973 fish sticks production: 127,156,000 lb; 1973 fish portions production: 396,089,000 lb.

Note:-- Processed Fishery Products, Annual Summary, 1989, Current Fishery Statistics No. 8903 will provide additional information.

# PROCESSED FISHERY PRODUCTS

## FISH FILLETS AND STEAKS

### PRODUCTION OF FRESH AND FROZEN FILLETS AND STEAKS, BY SPECIES, 1988 AND 1989

| Species | 1988 (1) | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Fillets: | | | | |
| Anglerfish | 4,763 | 13,368 | 5,499 | 14,596 |
| Bluefish | 371 | 594 | 349 | 492 |
| Cod | 61,824 | 137,062 | 73,595 | 131,996 |
| Cusk | 911 | 1,669 | 852 | 1,737 |
| Dolphin | 1,455 | 4,364 | 1,185 | 3,217 |
| Flounders | 53,189 | 162,552 | 43,589 | 141,533 |
| Groundfish mixed | 5,538 | 12,782 | 6,348 | 17,397 |
| Groupers | 2,376 | 10,849 | 2,184 | 10,399 |
| Haddock | 8,144 | 30,231 | 7,119 | 25,379 |
| Hake, Atlantic | 1,617 | 3,041 | 1,453 | 2,990 |
| Halibut | 629 | 1,974 | 1,581 | 4,691 |
| Lingcod | 1,238 | 2,075 | 1,275 | 2,212 |
| Ocean perch: | | | | |
| Atlantic | 2,091 | 5,307 | 1,955 | 3,427 |
| Pacific | 3,099 | 4,225 | 2,985 | 5,843 |
| Ocean pout | 656 | 863 | 1,238 | 1,663 |
| Pollock: | | | | |
| Atlantic | 13,569 | 20,978 | 10,919 | 18,200 |
| Alaska | 109,993 | 110,376 | 131,305 | 115,326 |
| Rockfishes | 36,498 | 56,882 | 25,701 | 42,626 |
| Sablefish | 2,146 | 4,065 | 1,334 | 2,806 |
| Salmon | 1,873 | 9,177 | 8,915 | 26,320 |
| Sea trout | 704 | 1,352 | 566 | 975 |
| Shark | 5,320 | 5,123 | 4,595 | 5,272 |
| Snapper: | | | | |
| Red | 272 | 1,484 | 346 | 1,971 |
| Unclassified | 729 | 3,971 | 587 | 3,625 |
| Spanish mackerel | 507 | 517 | 595 | 886 |
| Swordfish | 988 | 5,941 | 740 | 4,651 |
| Tuna | 3,548 | 15,006 | 1,722 | 6,224 |
| Whitefish | 316 | 1,108 | 304 | 1,711 |
| Wolffish | 201 | 437 | 162 | 315 |
| Yellow perch | 646 | 3,103 | 611 | 2,899 |
| Yellow pike | 238 | 797 | 168 | 565 |
| Unclassified | 30,645 | 65,199 | 24,453 | 54,264 |
| *Total* | *356,094* | *696,472* | *364,230* | *656,208* |
| Steaks: | | | | |
| Halibut | 11,256 | 34,699 | 12,593 | 40,132 |
| King mackerel | 82 | 229 | 96 | 258 |
| Salmon | 3,938 | 13,906 | 4,272 | 13,062 |
| Shark | 562 | 1,425 | 715 | 1,774 |
| Swordfish | 2,432 | 12,162 | 3,065 | 12,387 |
| Unclassified | 3,872 | 7,976 | 4,623 | 13,162 |
| *Total* | *22,142* | *70,397* | *25,364* | *80,775* |
| *Grand total* | *378,236* | *766,869* | *389,594* | *736,983* |

(1) Revised.

Note:--The following amounts of frozen fish blocks were produced from the fillets reported above: 44,601,863 lb valued at $43,982,769 in 1988, and 30,898,182 lb valued at $22,496,560 in 1989. Final data will be published in Processed Fishery Products, Annual Summary, 1989, Current Fishery Statistics No. 8903.

## CANNED FISHERY PRODUCTS

### PRODUCTION OF CANNED FISHERY PRODUCTS, BY SPECIES, 1988 AND 1989

| Species | Pounds per case | 1988 | | | 1989 | | |
|---|---|---|---|---|---|---|---|
| | | Standard cases | Thousand pounds | Thousand dollars | Standard cases | Thousand pounds | Thousand dollars |
| For human consumption: | | | | | | | |
| Fish: | | | | | | | |
| Herring | 23.4 | 184,613 | 4,320 | 6,032 | 206,185 | 4,825 | 7,224 |
| Mackerel | 45 | 401,764 | 18,079 | 8,777 | 391,600 | 17,622 | 6,983 |
| Roe and caviar | 48 | 10,523 | 505 | 3,023 | 168,604 | 8,093 | 9,622 |
| Salmon: | | | | | | | |
| Natural | 48 | 1,842,059 | 88,419 | 219,363 | 4,105,078 | 197,044 | 513,622 |
| Specialties | 48 | 3,898 | 187 | 831 | 106,554 | 5,115 | 9,957 |
| Sardines, Maine | 23.4 | 796,181 | 18,611 | 24,082 | 564,989 | 13,221 | 16,799 |
| Tuna: | | | | | | | |
| Solid | 19.5 | 6,336,445 | 123,561 | 293,860 | 6,619,358 | 129,077 | 317,665 |
| Chunk | 19.5 | 24,315,070 | 474,144 | 665,906 | 28,511,993 | 555,984 | 739,011 |
| Flakes and grated | 18 | 26,456 | 476 | 443 | 67,024 | 1,206 | 1,086 |
| *Total tuna* | -- | *30,677,971* | *598,181* | *960,209* | *35,198,375* | *686,267* | *1,057,762* |
| Specialties | 48 | 101 | 5 | 37 | 186 | 9 | 26 |
| Other | 48 | 725,316 | 34,815 | 31,002 | 368,848 | 17,705 | 16,517 |
| *Total fish* | -- | *34,642,426* | *763,122* | *1,253,356* | *41,110,419* | *949,901* | *1,638,512* |
| Shellfish: | | | | | | | |
| Clam and clam products: (1) | | | | | | | |
| Whole and minced | 15 | 1,834,375 | 27,516 | 42,175 | 2,364,261 | 35,464 | 44,357 |
| Chowder and juice | 30 | 3,027,300 | 90,819 | 48,566 | 2,937,637 | 88,129 | 37,781 |
| Specialties | 48 | 190,549 | 9,146 | 6,982 | 233,883 | 11,226 | 9,229 |
| Crabs, natural | 19.5 | 18,420 | 359 | 1,789 | 25,839 | 504 | 3,039 |
| Lobster meat and specialties | 48 | 21,779 | 1,045 | 1,053 | 20,425 | 980 | 931 |
| Oyster, specialties | 48 | 63,787 | 3,062 | 2,049 | 75,444 | 3,621 | 1,254 |
| Shrimp: | | | | | | | |
| Natural (2) | 6.75 | 663,132 | 4,476 | 24,904 | 388,610 | 2,623 | 8,753 |
| Specialties | 48 | 26,413 | 1,268 | 1,774 | 10,357 | 497 | 622 |
| Other | 48 | 157,243 | 7,548 | 5,419 | 350,889 | 16,843 | 9,058 |
| *Total shellfish* | -- | *6,002,998* | *145,239* | *134,711* | *6,407,345* | *159,887* | *115,024* |
| *Total for human consumption* | -- | *40,645,424* | *908,361* | *1,388,067* | *47,517,764* | *1,109,788* | *1,753,536* |
| For bait and animal food: | | | | | | | |
| Animal food | 48 | 4,642,373 | 222,834 | 92,205 | 7,195,393 | 345,379 | 237,829 |
| Salmon eggs | 48 | 1,784 | 86 | 517 | 1,774 | 85 | 514 |
| *Total for bait & animal food* | *48* | *4,644,157* | *222,920* | *92,722* | *7,197,167* | *345,464* | *238,343* |
| *Grand total* | -- | *45,289,581* | *1,131,281* | *1,480,789* | *54,714,931* | *1,455,252* | *1,991,879* |

(1) "Cut out" or "drained" weight of can contents are given for whole or minced clams, and net contents for other clam products.

(2) Drained weight.

Note:--Final figures will be published in Processed Fishery Products, Annual Summary, 1989, Current Fishery Statistics No. 8903.

# PROCESSED FISHERY PRODUCTS

## CANNED FISHERY PRODUCTS

### PRODUCTION OF CANNED TUNA, 1988-89

| Item | Pounds per case | 1988 | | 1989 | |
|---|---|---|---|---|---|
| | | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Albacore: | | | | | |
| Solid | 19.5 | 5,895 | 278,745 | 6,063 | 301,348 |
| Chunk | 19.5 | 829 | 38,419 | 977 | 43,943 |
| Flakes and grated | 18 | (1) | (1) | (1) | (1) |
| *Total* | -- | *6,724* | *317,164* | *7,040* | *345,291* |
| Lightmeat: | | | | | |
| Solid | 19.5 | 442 | 15,115 | 556 | 16,317 |
| Chunk | 19.5 | 23,486 | 627,487 | 27,535 | 695,068 |
| Flakes and grated | 18 | 26 | 443 | 67 | 1,086 |
| *Total* | -- | *23,954* | *643,045* | *28,158* | *712,471* |
| *Grand total* | -- | *30,678* | *960,209* | *35,198* | *1,057,762* |

(1) Included with lightmeat.

### PRODUCTION OF CANNED SHRIMP, BY AREA, 1988-89

| Area | Pounds per case | 1988(1) | | 1989 | |
|---|---|---|---|---|---|
| | | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Gulf States | 6.75 | 550 | 20,327 | 386 | 8,710 |
| Pacific States | 6.75 | 113 | 4,577 | 3 | 43 |
| *Total* | *6.75* | *663* | *24,904* | *389* | *8,753* |

(1) Revised.

### PRODUCTION OF CANNED SALMON, 1988-89

| Item | Pounds per case | 1988(1) | | 1989 | |
|---|---|---|---|---|---|
| | | Thousand standard cases | Thousand dollars | Thousand standard cases | Thousand dollars |
| Chinook or king | 48 | 2 | 353 | 5 | 654 |
| Chum or keta | 48 | 196 | 27,597 | 169 | 18,290 |
| Pink | 48 | 1,374 | 138,131 | 3,188 | 361,675 |
| Silver or coho | 48 | 39 | 6,698 | 36 | 5,242 |
| Red or sockeye | 48 | 231 | 46,584 | 707 | 127,761 |
| *Total* | 48 | *1,842* | *219,363* | *4,105* | *513,622* |

(1) Revised.

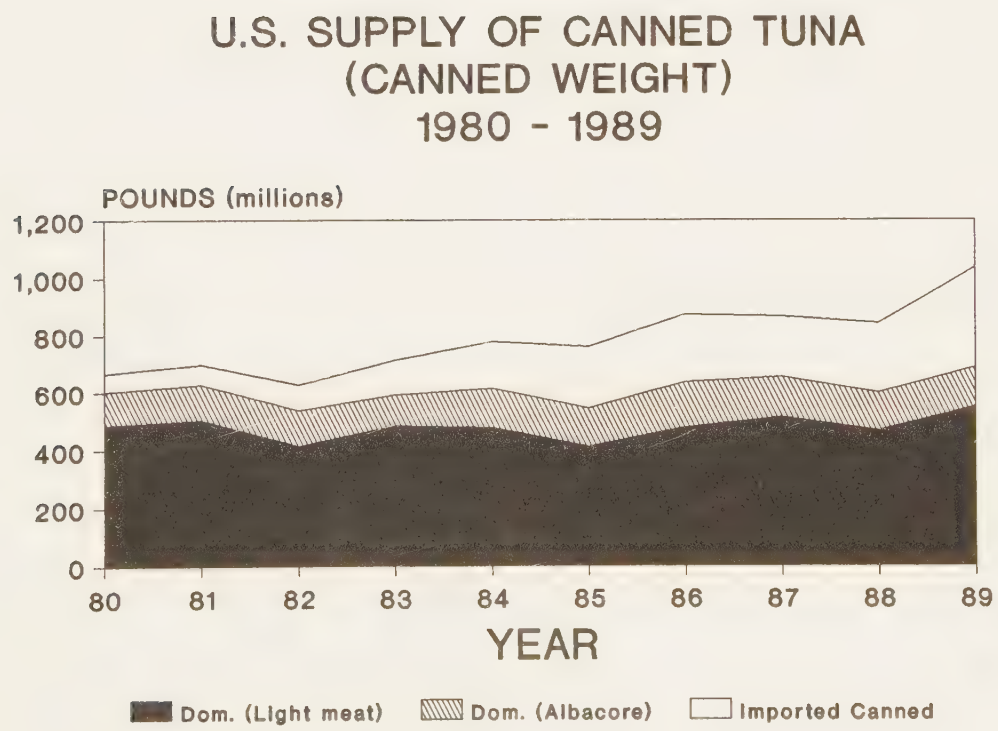
# PROCESSED FISHERY PRODUCTS

## CANNED FISHERY PRODUCTS

### PRODUCTION OF CANNED FISHERY PRODUCTS, 1980-89

| Year | For human consumption | | For animal food and bait | | Total | |
|---|---|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| 1980..... | 1,009,280 | 1,781,948 | 506,817 | 145,708 | 1,516,097 | 1,927,656 |
| 1981..... | 1,067,415 | *1,819,409 | 408,783 | 134,562 | 1,476,198 | 1,953,971 |
| 1982..... | 876,157 | 1,325,435 | 407,219 | 132,048 | 1,283,376 | 1,457,483 |
| 1983..... | 987,329 | 1,393,604 | 403,466 | 140,874 | 1,390,795 | 1,534,478 |
| 1984..... | 1,041,845 | 1,435,532 | 369,123 | 141,931 | 1,410,968 | 1,577,463 |
| 1985..... | 913,078 | 1,269,311 | 248,068 | 91,003 | 1,161,146 | 1,360,314 |
| 1986..... | 1,011,080 | 1,384,213 | 320,953 | 100,377 | 1,332,033 | 1,484,590 |
| 1987..... | 965,023 | 1,476,479 | 220,641 | 85,416 | 1,185,664 | 1,561,895 |
| 1988 (1)..... | 908,361 | 1,388,067 | 222,920 | 92,722 | 1,131,281 | 1,480,789 |
| 1989..... | *1,109,788 | 1,753,536 | 345,464 | *238,343 | 1,455,252 | *1,991,879 |

(1) Revised. *Record. Records--1973 animal food and bait: 696,357,000 lb; 1973 total: 1,647,357,000 lb.



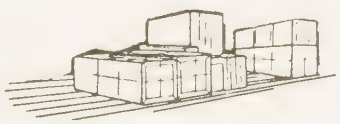
## INDUSTRIAL PRODUCTS

### PRODUCTION OF MEAL, OIL, AND SOLUBLES, 1988 AND 1989

| Product | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Dried scrap and meal: | | | | |
| Fish: | | | | |
| Menhaden (1)..... | 504,524 | 113,984 | 463,944 | 89,083 |
| Tuna and mackerel.... | 75,934 | 9,814 | 82,270 | 10,392 |
| Unclassified..... | 44,518 | 5,422 | 46,790 | 14,055 |
| ***Total.....*** | ***624,976*** | ***129,220*** | ***593,004*** | ***113,530*** |
| Shellfish..... | 18,820 | 1,457 | 25,378 | 1,519 |
| ***Total, scrap and meal*** | ***643,796*** | ***130,677*** | ***618,382*** | ***115,049*** |
| ***Solubles, total.....*** | ***223,449*** | ***14,571*** | ***232,709*** | ***17,746*** |
| Body oil: | | | | |
| Menhaden (1)..... | 217,493 | 42,776 | 218,550 | 23,172 |
| Unclassified..... | 7,240 | 819 | 6,936 | 354 |
| ***Total, oil.....*** | ***224,733*** | ***43,595*** | ***225,486*** | ***23,526*** |

(1) May include small quantities made from other species.

Note:--To convert pounds of oil to gallons divide by 7.75. The above data include production in American Samoa and Puerto Rico. Final data will be published in Fishery Products, Annual Summary, 1989, Current Fisheries Statistics 8903.



### PRODUCTION OF INDUSTRIAL PRODUCTS, 1980-89

| Year | Quantity | | | Value | | |
|---|---|---|---|---|---|---|
| | Meal | Solubles | Marine animal oil | Meal, solubles, and oil | Other industrial products | Grand total |
| | ----------Thousand pounds---------- | | | ----------Thousand dollars---------- | | |
| 1980..... | 723,844 | 267,364 | 312,511 | 206,081 | *63,525 | *269,606 |
| 1981..... | 637,018 | 257,242 | 184,302 | 166,738 | 43,497 | 210,235 |
| 1982..... | 746,854 | 305,002 | 347,513 | 192,138 | 41,499 | 233,637 |
| 1983..... | 763,536 | 317,006 | *399,334 | *212,606 | 39,785 | 252,391 |
| 1984..... | 751,528 | 252,076 | 372,804 | 189,796 | 44,258 | 234,054 |
| 1985..... | 721,682 | 323,028 | 285,077 | 144,724 | 37,775 | 182,499 |
| 1986..... | 702,194 | 195,148 | 336,708 | 138,765 | 36,825 | 175,590 |
| 1987..... | *786,978 | 249,289 | 298,496 | 174,321 | 37,524 | 211,845 |
| 1988..... | 643,796 | 223,449 | 224,733 | 188,843 | 46,737 | 235,580 |
| 1989..... | 618,382 | 232,709 | 225,486 | 156,321 | 49,756 | 206,077 |

*Record. Record--1959 fish solubles production: 330,718,000 lb.

Note:--Does not include the value of imported items that may be further processed.

# U.S. COLD STORAGE HOLDINGS

## FROZEN FISHERY PRODUCTS

### U.S. COLD STORAGE HOLDINGS OF FISHERY PRODUCTS, 1989

| Item | January 1 | March 31 | June 30 | September 30 | December 31 |
|---|---|---|---|---|---|
| | Thousand pounds | | | | |
| Blocks: | | | | | |
| Cod | 22,335 | 14,047 | 19,946 | 22,907 | 14,242 |
| Flounder | 3,943 | 2,433 | 2,185 | 4,141 | 3,635 |
| Greenland turbot | 591 | 141 | 80 | 32 | 100 |
| Haddock | 2,546 | 1,504 | 1,526 | 1,747 | 2,390 |
| Ocean perch | 1,214 | 670 | 678 | 601 | 692 |
| Pollock: Alaska | 18,175 | 16,422 | 9,281 | 10,095 | 10,533 |
| Saithe and other | 1,361 | 1,309 | 2,570 | 2,212 | 2,413 |
| Whiting | 3,149 | 3,983 | 2,868 | 1,776 | 2,162 |
| Minced (grated) all species | 4,109 | 4,529 | 7,765 | 11,510 | 11,372 |
| Unclassified | 2,757 | 3,229 | 2,796 | 7,483 | 7,732 |
| *Total blocks* | *60,180* | *48,267* | *49,695* | *62,504* | *55,271* |
| Fillets and steaks: | | | | | |
| Cod | 20,582 | 17,122 | 36,347 | 41,105 | 35,244 |
| Flounder | 9,792 | 7,049 | 8,234 | 12,031 | 14,838 |
| Greenland turbot | 1,711 | 550 | 1,030 | 1,218 | 754 |
| Haddock | 3,554 | 1,971 | 5,046 | 5,350 | 8,103 |
| Halibut | 2,374 | 1,727 | 1,876 | 2,343 | 2,327 |
| Ocean perch | 7,626 | 3,002 | 3,132 | 5,039 | 7,617 |
| Pollock | 20,709 | 19,714 | 21,853 | 25,648 | 30,772 |
| Whiting | 4,227 | 2,740 | 2,018 | 2,720 | 3,270 |
| Unclassified | 14,886 | 10,356 | 11,962 | 15,923 | 13,451 |
| *Total fillets and steaks* | *85,461* | *64,231* | *91,498* | *111,377* | *116,376* |
| Fish sticks and portions (cooked uncooked, all species) | 34,873 | 27,607 | 28,475 | 16,144 | 27,378 |
| Round, dressed, etc.: | | | | | |
| Catfish | 9,096 | 8,122 | 7,280 | 7,025 | 9,109 |
| Halibut | 20,486 | 5,542 | 12,858 | 13,561 | 9,960 |
| Rainbow trout | 2,129 | 2,221 | 2,012 | 1,824 | 1,902 |
| Salmon | 45,164 | 18,184 | 10,685 | 50,812 | 39,657 |
| Whiting | 1,768 | 1,857 | 2,226 | 1,216 | 630 |
| Unclassified | 33,424 | 28,312 | 29,514 | 41,482 | 33,360 |
| Surimi and analog products | N.A. | 28,605 | 26,477 | 26,054 | 24,998 |
| Crabs: | | | | | |
| King | 2,667 | 1,742 | 1,397 | 2,464 | 3,393 |
| Snow | 11,373 | 15,397 | 26,950 | 20,233 | 12,832 |
| Unclassified | 4,184 | 5,055 | 6,371 | 5,596 | 3,307 |
| Lobsters (spiny and other) | 5,273 | 4,330 | 4,369 | 3,840 | 3,028 |
| Scallops | 4,990 | 3,556 | 3,327 | 3,598 | 3,404 |
| Shrimp: | | | | | |
| Raw, headless | 26,168 | 23,297 | 21,207 | 24,656 | 28,578 |
| Breaded | 8,805 | 7,349 | 8,787 | 6,840 | 6,359 |
| Peeled | 15,651 | 11,762 | 14,230 | 14,670 | 14,113 |
| Unclassified | 7,945 | 8,126 | 8,649 | 7,344 | 7,134 |
| *Total shrimp* | *58,569* | *50,534* | *52,873* | *53,510* | *56,184* |
| Squid | 11,991 | 12,182 | 10,531 | 14,453 | 16,628 |
| Other shellfish | 7,673 | 6,765 | 8,102 | 8,404 | 9,386 |
| Bait and animal food | 6,368 | 9,734 | 10,037 | 15,243 | 9,834 |
| *Total fish and shellfish* | *393,678* | *330,061* | *374,146* | *444,887* | *420,009* |

N.A.--Not available.

Note:--Holdings of frozen fishery products include domestic and imported fish and shellfish.

Source:--Frozen Fishery Products, Annual Summary, 1989, Current Fishery Statistics No. 8901 will provide additional information.

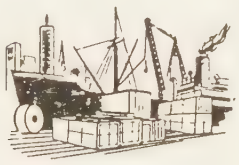
# U.S. Imports of Edible Fishery Products, 1989
# (Total Imports $5,497.8 million)

# IMPORTS

## EDIBLE AND NONEDIBLE FISHERY PRODUCTS IMPORTS, 1980-89

| Year | Edible | | Nonedible | Total |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand dollars | Thousand dollars |
| 1980 | 2,144,928 | 2,686,721 | 961,731 | 3,648,452 |
| 1981 | 2,272,474 | 3,034,206 | 1,171,805 | 4,206,011 |
| 1982 | 2,225,048 | 3,202,408 | 1,321,170 | 4,523,578 |
| 1983 | 2,386,771 | 3,626,704 | 1,502,668 | 5,129,372 |
| 1984 | 2,454,287 | 3,742,333 | 2,141,060 | 5,883,393 |
| 1985 | 2,754,018 | 4,064,334 | 2,614,252 | 6,678,586 |
| 1986 | 2,978,905 | 4,813,488 | 2,812,805 | 7,626,293 |
| 1987 | 3,201,132 | *5,711,233 | 3,106,464 | 8,817,697 |
| 1988 | 2,967,786 | 5,441,628 | 3,430,367 | 8,871,995 |
| 1989 | *3,243,017 | 5,497,849 | *4,106,507 | *9,604,356 |

*Record. Source:--U.S. Department of Commerce, Bureau of the Census.



## FISHERY PRODUCTS IMPORTS: VALUE, DUTIES COLLECTED, AND AD VALOREM EQUIVALENT, 1980-89

| Year | Value | | Duties collected | | Average ad valorem equivalent | |
|---|---|---|---|---|---|---|
| | Fishery imports | All imports | Fishery imports | All imports | Fishery imports | All imports |
| | Thousand dollars | | Thousand dollars | | Percent | |
| 1980 | 3,648,452 | 239,943,468 | 87,288 | 7,535,421 | 2.4 | 3.1 |
| 1981 | 4,206,011 | 260,981,800 | 102,064 | 8,893,200 | 2.4 | 3.4 |
| 1982 | 4,523,578 | 243,951,900 | 111,952 | 8,687,452 | 2.5 | 3.6 |
| 1983 | 5,129,372 | 256,679,524 | 116,503 | 9,430,004 | 2.3 | 3.7 |
| 1984 | 5,883,393 | 322,989,519 | 145,689 | 12,042,152 | 2.5 | 3.7 |
| 1985 | 6,678,586 | 343,553,150 | 191,421 | 13,066,970 | 2.9 | 3.8 |
| 1986 | 7,626,293 | 368,656,594 | 187,791 | 13,312,112 | 2.5 | 3.6 |
| 1987 | 8,817,697 | 402,066,002 | 178,861 | 13,922,567 | 2.0 | 3.5 |
| 1988 | 8,871,995 | 437,140,185 | 206,470 | 15,054,304 | 2.3 | 3.4 |
| 1989 | 9,604,356 | 472,976,600 | 235,851 | 16,096,400 | 2.5 | 3.4 |

Source:--U.S. Department of Commerce, Bureau of the Census.

# FOREIGN TRADE

## IMPORTS

### FISHERY PRODUCTS IMPORTS, BY PRINCIPAL ITEMS, 1988 AND 1989

| Item | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Edible fishery products: | | | | |
| Fresh and frozen: | | | | |
| Whole or eviscerated: | | | | |
| Cod, cusk, haddock and flounder | 85,139 | 52,717 | 100,157 | 58,443 |
| Halibut | 11,952 | 25,432 | 10,374 | 23,363 |
| Salmon | 50,144 | 155,173 | 98,799 | 228,855 |
| Tuna: | | | | |
| Albacore | 195,991 | 202,967 | 200,306 | 202,291 |
| Other (1) | 354,156 | 169,331 | 449,431 | 199,449 |
| Other | 225,623 | 206,065 | 230,537 | 231,014 |
| Fillets and steaks: | | | | |
| Flounder | 58,534 | 119,996 | 58,455 | 125,656 |
| Groundfish | 253,187 | 431,126 | 265,001 | 437,044 |
| Other | 205,988 | 358,766 | 194,162 | 364,600 |
| Blocks and slabs | 303,237 | 382,482 | 283,278 | 325,689 |
| Shrimp | 489,740 | 1,725,971 | 491,649 | 1,684,788 |
| Crabmeat | 12,346 | 62,763 | 10,317 | 41,389 |
| Lobster: | | | | |
| American (includes fresh-cooked meat) | 39,732 | 183,482 | 48,912 | 246,420 |
| Spiny | 37,806 | 363,195 | 23,208 | 206,925 |
| Scallops (meats) | 32,039 | 115,706 | 40,874 | 139,008 |
| Analog products with shellfish | 24,516 | 41,570 | 16,153 | 28,742 |
| Other fish and shellfish | 93,038 | 182,806 | 105,755 | 177,224 |
| Canned: | | | | |
| Herring, not in oil | 6,541 | 10,264 | 5,463 | 7,878 |
| Sardines: | | | | |
| In oil | 22,813 | 30,824 | 21,771 | 29,840 |
| Not in oil | 30,546 | 23,154 | 34,608 | 25,529 |
| Tuna: | | | | |
| In oil | 318 | 744 | 422 | 924 |
| Not in oil | 244,186 | 297,922 | 347,790 | 374,987 |
| Balls, cakes, and puddings | 5,650 | 8,376 | 11,104 | 17,694 |
| Clams | 11,268 | 13,993 | 12,686 | 11,145 |
| Crabmeat | 7,720 | 19,622 | 8,280 | 21,649 |
| Lobsters: | | | | |
| American | 594 | 5,342 | 150 | 990 |
| Spiny | 52 | 280 | 164 | 422 |
| Oysters | 27,268 | 39,675 | 20,405 | 36,893 |
| Shrimp | 14,138 | 28,730 | 11,315 | 20,399 |
| Other fish and shellfish | 53,263 | 71,986 | 57,966 | 90,863 |
| Cured: | | | | |
| Pickled or salted: | | | | |
| Cod, haddock, hake, et al | 31,361 | 52,665 | 16,641 | 25,405 |
| Herring | 20,333 | 8,618 | 11,099 | 5,064 |
| Other | 11,784 | 27,718 | 38,070 | 66,720 |
| Other fish and shellfish | 6,783 | 22,167 | 17,715 | 40,547 |
| *Total edible fishery products* | *2,967,786* | *5,441,628* | *3,243,017* | *5,497,849* |
| Nonedible fishery products: | | | | |
| Meal and scrap | 265,310 | 49,567 | 171,112 | 31,715 |
| Fish oils | 27,667 | 9,666 | 25,449 | 9,936 |
| Other | - | 3,371,134 | - | 4,064,856 |
| *Total nonedible fishery products* | - | *3,430,367* | - | *4,106,507* |
| *Grand total* | - | *8,871,995* | - | *9,604,356* |

(1) Includes loins and discs.

Note:--Data include imports into the United States and Puerto Rico and include landings of tuna by foreign vessels at American Samoa. Statistics on imports are the weight of individual products as exported, i.e., fillets, steaks, whole, headed, etc.

Source:--U.S. Department of Commerce, Bureau of the Census.

## IMPORTS

### EDIBLE AND NONEDIBLE FISHERY PRODUCTS IMPORTS, 1989

| Continent and Country | Edible | | Nonedible | Total |
|---|---|---|---|---|
| | Thousand pounds | - - - - - -Thousand dollars- - - - - - | | |
| North America: | | | | |
| Canada | 757,253 | 1,212,139 | 290,962 | 1,503,101 |
| Mexico | 129,795 | 392,663 | 46,600 | 439,263 |
| Panama | 42,358 | 98,316 | 4,190 | 102,506 |
| Dominican Republic | 689 | 1,142 | 71,691 | 72,833 |
| Honduras | 13,570 | 58,960 | 22 | 58,982 |
| Other | 66,993 | 161,897 | 25,128 | 187,025 |
| *Total* | *1,010,658* | *1,925,117* | *438,593* | *2,363,710* |
| South America: | | | | |
| Ecuador | 132,967 | 349,970 | 296 | 350,266 |
| Brazil | 45,922 | 101,326 | 39,670 | 140,996 |
| Chile | 56,968 | 79,355 | 22,760 | 102,115 |
| Peru | 27,956 | 30,391 | 64,399 | 94,790 |
| Venezuela | 73,983 | 82,461 | 3,077 | 85,538 |
| Other | 103,342 | 124,966 | 49,905 | 174,871 |
| *Total* | *441,138* | *768,469* | *180,107* | *948,576* |
| Europe: | | | | |
| European Economic Community: | | | | |
| Italy | 1,268 | 2,151 | 1,169,584 | 1,171,735 |
| France | 59,038 | 24,158 | 281,754 | 305,912 |
| Fed. Rep of Germany | 2,144 | 3,286 | 130,808 | 134,094 |
| Denmark | 38,809 | 61,084 | 54,812 | 115,896 |
| United Kingdom | 8,975 | 29,449 | 80,598 | 110,047 |
| Other | 67,909 | 90,927 | 148,673 | 239,600 |
| *Total* | *178,143* | *211,055* | *1,866,229* | *2,077,284* |
| Other: | | | | |
| Iceland | 97,724 | 169,657 | 774 | 170,431 |
| Norway | 55,618 | 133,393 | 7,915 | 141,308 |
| Switzerland | 712 | 2,480 | 58,230 | 60,710 |
| Faroe Island | 13,282 | 27,945 | - | 27,945 |
| Turkey | 1,002 | 1,900 | 21,031 | 22,931 |
| Other | 19,616 | 22,787 | 45,704 | 68,491 |
| *Total* | *187,954* | *358,162* | *133,654* | *491,816* |
| Asia: | | | | |
| Thailand | 352,013 | 503,778 | 288,972 | 792,750 |
| Hong Kong | 20,850 | 24,016 | 427,662 | 451,678 |
| Japan | 103,318 | 176,656 | 241,262 | 417,918 |
| China | 121,813 | 303,932 | 32,134 | 336,066 |
| Republic of Korea | 103,593 | 147,425 | 118,233 | 265,658 |
| Other | 548,065 | 757,058 | 331,534 | 1,088,592 |
| *Total* | *1,249,652* | *1,912,865* | *1,439,797* | *3,352,662* |
| Australia and Oceania: | | | | |
| New Zealand | 50,915 | 140,263 | 6,176 | 146,439 |
| Australia | 18,007 | 123,189 | 14,144 | 137,333 |
| Vanuatu | 35,221 | 13,462 | - | 13,462 |
| French Polynesia | 62 | 67 | 7,492 | 7,559 |
| Papua New Guinea | 127 | 881 | 726 | 1,607 |
| Other | 988 | 1,838 | 1,728 | 3,566 |
| *Total* | *105,320* | *279,700* | *30,266* | *309,966* |
| Africa: | | | | |
| Ghana | 42,319 | 13,861 | - | 13,861 |
| Morocco | 2,248 | 4,917 | 4,833 | 9,750 |
| Mauritius | 9,160 | 7,625 | 229 | 7,854 |
| Nigeria | 2,878 | 6,582 | 733 | 7,315 |
| Botswana | - | - | 5,943 | 5,943 |
| Other | 13,547 | 9,496 | 6,123 | 15,619 |
| *Total* | *70,152* | *42,481* | *17,861* | *60,342* |
| *Grand total* | *3,243,017* | *5,497,849* | *4,106,507* | *9,604,356* |

Source:--U.S. Department of Commerce, Bureau of the Census.

# FOREIGN TRADE

## IMPORTS

### REGULAR AND MINCED FISH BLOCKS AND SLABS IMPORTS, BY SPECIES AND TYPE, 1988 AND 1989

| Species and type | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Regular blocks and slabs: | | | | |
| Cod | 150,220 | 237,317 | 135,615 | 195,071 |
| Flatfish: | | | | |
| Turbot | 738 | 848 | 677 | 796 |
| Other | 7,303 | 11,207 | 6,794 | 9,528 |
| Haddock | 17,846 | 27,904 | 12,741 | 21,603 |
| Ocean Perch, Atlantic | 1,350 | 1,518 | 1,005 | 1,219 |
| Pollock | 61,518 | 47,647 | 45,760 | 31,512 |
| Whiting | 16,646 | 13,935 | 24,249 | 15,548 |
| Other | 9,507 | 17,179 | 12,601 | 21,240 |
| *Total* | *265,128* | *357,555* | *239,442* | *296,517* |
| Minced blocks and slabs | 38,109 | 24,927 | 43,836 | 29,172 |
| *Grand total* | *303,237* | *382,482* | *283,278* | *325,689* |

Source:--U.S. Department of Commerce, Bureau of the Census.

### REGULAR AND MINCED FISH BLOCKS AND SLABS IMPORTS, BY COUNTRY OF ORIGIN, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Canada | 126,140 | 171,906 | 121,598 | 154,106 |
| Denmark | 43,394 | 69,144 | 34,389 | 51,243 |
| Iceland | 20,684 | 28,212 | 21,868 | 27,935 |
| Republic of Korea | 51,333 | 45,060 | 30,684 | 25,352 |
| Japan | 5,276 | 5,618 | 11,821 | 13,449 |
| Argentina | 10,008 | 7,556 | 15,805 | 9,942 |
| Poland | 12,771 | 10,149 | 14,230 | 8,774 |
| Norway | 19,975 | 29,690 | 5,896 | 8,013 |
| Uruguay | 6,256 | 4,823 | 8,279 | 5,538 |
| Other | 7,400 | 10,324 | 18,708 | 21,337 |
| *Total* | *303,237* | *382,482* | *283,278* | *325,689* |

Source:--U.S. Department of Commerce, Bureau of the Census.

### GROUNDFISH FILLET AND STEAK IMPORTS, BY SPECIES, 1988 AND 1989 (1)

| Species | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Cod | 159,188 | 287,555 | 168,095 | 290,084 |
| Haddock (2) | 52,141 | 84,866 | 52,524 | 88,363 |
| Ocean Perch, Atlantic | 41,858 | 58,705 | 44,382 | 58,597 |
| *Total* | *253,187* | *431,126* | *265,001* | *437,044* |

(1) Does not include data on fish blocks and slabs.
(2) Includes some quantities of cusk, hake, and pollock fillets.

Note:--Imports and Exports of Fishery Products Annual Summary, 1989, Current Fishery Statistics No. 8902 will provide additional information.

# IMPORTS

## CANNED TUNA NOT IN OIL, QUOTA AND IMPORTS, 1980-89

| Year | Quota | Imports | |
|---|---|---|---|
| | (1) | Under quota (2) | Over quota (3) |
| | Thousand pounds | | |
| 1980 | 109,074 | 109,074 | 5,064 |
| 1981 | 104,355 | 76,683 | - |
| 1982 | 109,742 | 92,759 | - |
| 1983 | 91,904 | 91,904 | 28,304 |
| 1984 | 95,587 | 95,587 | 68,328 |
| 1985 | 97,496 | 97,496 | 116,854 |
| 1986 | 81,092 | 81,092 | 153,057 |
| 1987 | 91,539 | 91,539 | 123,364 |
| 1988 | 85,185 | 85,185 | 193,784 |
| 1989 | 76,734 | 76,734 | 234,323 |

(1) Imports have been subject to tariff quotas since April 14, 1956, and are based on 20 percent of the previous year's domestic pack, excluding the pack in American Samoa.

(2) Dutiable in 1956 to 1967 at 12.5 percent ad valorem; 1968, 11 percent; 1969, 10 percent; 1970, 8.5 percent; 1971, 7 percent; and 1972 to 1989, 6 percent.

(3) Dutiable in 1972 to 1989, 12.5 percent.

Note:--Data in this table will not agree with tuna import data released by the U.S. Department of Commerce, Bureau of the Census. Any tuna entered for consumption or withdrawn from a warehouse for consumption during the calendar year, except for receipts from insular possessions of the U.S., is subject to this quota.

Source:--U.S. Department of the Treasury, U.S. Customs Service.

## CANNED TUNA, BY COUNTRY OF ORIGIN, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Thailand | 178,941 | 207,538 | 248,281 | 260,996 |
| Taiwan | 24,013 | 41,759 | 27,874 | 44,857 |
| Philippines | 18,505 | 18,629 | 34,008 | 31,129 |
| Indonesia | 4,854 | 5,690 | 22,639 | 19,667 |
| Japan | 3,370 | 6,992 | 2,460 | 5,172 |
| Malaysia | 2,824 | 3,964 | 4,259 | 5,131 |
| Other | 11,997 | 14,094 | 8,691 | 8,959 |
| *Total* | *244,504* | *298,666* | *348,212* | *375,911* |

Source:--U.S. Department of Commerce, Bureau of the Census.

## IMPORTS

### SHRIMP IMPORTS, BY COUNTRY OF ORIGIN, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| North America: | | | | |
| Mexico | 63,524 | 310,549 | 60,387 | 285,138 |
| Panama | 14,737 | 57,649 | 17,205 | 68,470 |
| Honduras | 9,137 | 32,289 | 7,565 | 25,420 |
| Guatemala | 4,278 | 14,368 | 6,234 | 20,268 |
| El Salvador | 8,171 | 26,138 | 6,163 | 17,818 |
| Costa Rica | 3,656 | 12,746 | 3,036 | 10,930 |
| Canada | 5,343 | 14,320 | 4,020 | 9,140 |
| Trinidad and Tobago | 393 | 1,351 | 383 | 945 |
| Belize | 130 | 507 | 206 | 757 |
| Haiti | 52 | 323 | 53 | 240 |
| Other | 282 | 1,010 | 28 | 76 |
| *Total* | *109,703* | *471,250* | *105,280* | *439,202* |
| South America: | | | | |
| Ecuador | 103,971 | 382,109 | 81,139 | 308,589 |
| Venezuela | 8,931 | 28,478 | 12,304 | 44,165 |
| Brazil | 19,934 | 59,109 | 16,772 | 41,433 |
| Colombia | 4,194 | 18,585 | 6,013 | 26,060 |
| Peru | 4,083 | 14,011 | 3,979 | 14,910 |
| Guyana | 4,671 | 12,439 | 4,898 | 13,360 |
| Argentina | 496 | 1,447 | 2,038 | 8,553 |
| French Guiana | 2,636 | 9,536 | 1,469 | 5,249 |
| Chile | 771 | 2,964 | 856 | 3,097 |
| Suriname | 711 | 2,703 | 183 | 727 |
| Other | 11 | 31 | 84 | 325 |
| *Total* | *150,409* | *531,412* | *129,735* | *466,468* |
| Europe: | | | | |
| European Economic Community: | | | | |
| United Kingdom | 1,200 | 3,732 | 962 | 3,040 |
| Spain | 124 | 836 | 172 | 751 |
| Belgium | 350 | 998 | 137 | 339 |
| Federal Republic of Germany | 95 | 453 | 61 | 332 |
| Portugal | - | - | 46 | 104 |
| Other | 479 | 2,042 | 110 | 241 |
| *Total* | *2,248* | *8,061* | *1,488* | *4,807* |
| Other: | | | | |
| Iceland | 120 | 558 | 162 | 1,036 |
| Switzerland | 183 | 544 | 221 | 678 |
| Faroe Islands | - | - | 143 | 595 |
| Norway | 1,245 | 5,225 | 155 | 562 |
| German Democratic Republic | - | - | 35 | 122 |
| Other | 154 | 460 | 54 | 201 |
| *Total* | *1,702* | *6,787* | *770* | *3,194* |
| Asia: | | | | |
| China | 104,316 | 300,042 | 102,988 | 276,713 |
| Thailand | 23,676 | 91,290 | 48,587 | 187,134 |
| Philippines | 7,635 | 37,469 | 14,238 | 56,796 |
| Indonesia | 4,335 | 17,638 | 13,493 | 51,933 |
| India | 32,169 | 55,048 | 28,680 | 51,649 |
| Bangladesh | 11,659 | 50,452 | 12,905 | 46,003 |
| Singapore | 5,599 | 19,114 | 7,899 | 29,259 |
| Taiwan | 17,365 | 85,633 | 7,427 | 23,011 |
| Malaysia | 6,073 | 15,093 | 7,976 | 19,185 |
| Pakistan | 14,548 | 25,237 | 9,806 | 17,066 |
| Other | 8,295 | 25,153 | 8,026 | 22,059 |
| *Total* | *235,670* | *722,169* | *262,025* | *780,808* |
| Australia and Oceania | 1,009 | 6,005 | 748 | 3,873 |
| Africa | 3,137 | 9,017 | 2,918 | 6,835 |
| *Grand total* | *503,878* | *1,754,701* | *502,964* | *1,705,187* |

Note:--Statistics on imports are the weights of the individual products as exported, i.e., raw headless, peeled, etc.

Source:--U.S. Department of Commerce, Bureau of the Census.

## IMPORTS

### SHRIMP IMPORTS, BY TYPE OF PRODUCT, 1988 AND 1989

| Type of product | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Shell-on (heads off) | 358,765 | 1,337,211 | 372,455 | 1,363,564 |
| Peeled: | | | | |
| Canned | 14,138 | 28,730 | 11,315 | 20,399 |
| Not breaded: | | | | |
| Raw | 96,520 | 244,016 | 109,417 | 277,812 |
| Other | 33,087 | 142,256 | 9,232 | 42,471 |
| Breaded | 1,368 | 2,488 | 545 | 941 |
| *Total* | *503,878* | *1,754,701* | *502,964* | *1,705,187* |

Source:--U.S. Department of Commerce, Bureau of the Census.

### FISH MEAL AND SCRAP IMPORTS, BY COUNTRY OF ORIGIN, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Canada | 70,524 | 11,209 | 34,129 | 10,333 |
| Peru | 103,052 | 19,997 | 63,594 | 10,306 |
| Chile | 56,058 | 12,236 | 25,611 | 4,243 |
| Panama | 22,268 | 3,521 | 10,761 | 1,380 |
| Swedan | - | - | 273 | 155 |
| Mexico | 958 | 245 | 670 | 135 |
| Norway | 200 | 55 | 271 | 104 |
| Argentina | - | - | 461 | 90 |
| Other | 12,250 | 2,304 | 35,342 | 4,969 |
| *Total* | *265,310* | *49,567* | *171,112* | *31,715* |

Source:--U.S. Department of Commerce, Bureau of the Census.

# FOREIGN TRADE

## EXPORTS

### DOMESTIC FISHERY PRODUCTS EXPORTS, BY PRINCIPAL ITEMS, 1988 AND 1989

| Item | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Edible fishery products: | | | | |
| Fresh and frozen: | | | | |
| Whole or eviscerated: | | | | |
| Butterfish | 10,827 | 14,121 | 3,455 | 2,818 |
| Eels | 679 | 1,008 | 3,703 | 3,141 |
| Halibut | 6,185 | 11,470 | 19,066 | 27,639 |
| Herring | 74,597 | 76,551 | 81,028 | 42,967 |
| Mackerel | 3,580 | 1,328 | 9,298 | 3,796 |
| Mullet | 1,465 | 1,074 | 1,465 | 1,041 |
| Pollock | 4,903 | 4,681 | 9,323 | 5,328 |
| Sablefish | 41,804 | 87,794 | 50,174 | 83,004 |
| Salmon | 292,400 | 825,934 | 328,557 | 728,257 |
| Unclassified | 211,991 | 208,284 | 243,578 | 227,451 |
| Fillets, steaks, and portions: | | | | |
| Cod | 11,941 | 18,196 | 4,386 | 5,605 |
| Halibut | 1,797 | 3,099 | 2,038 | 3,000 |
| Salmon | 1,715 | 4,457 | 8,818 | 19,006 |
| Unclassified | 71,899 | 86,692 | 76,933 | 86,840 |
| Fish sticks and portions | 2,150 | 3,348 | 50,851 | 48,613 |
| Clams | 1,558 | 2,540 | 1,653 | 3,508 |
| Crabs | 68,950 | 242,383 | 81,668 | 246,292 |
| Lobsters | 8,058 | 36,270 | 15,192 | 61,057 |
| Scallops | 668 | 2,808 | 1,914 | 6,482 |
| Sea urchins | 5,703 | 42,090 | 12,290 | 68,264 |
| Shrimp | 22,116 | 78,043 | 20,802 | 67,537 |
| Squid | 37,847 | 25,113 | 40,212 | 29,417 |
| Other fish and shellfish | 9,182 | 23,355 | 23,129 | 47,023 |
| Canned: | | | | |
| Salmon | 32,900 | 91,568 | 40,415 | 89,720 |
| Sardines | 8,555 | 7,902 | 8,951 | 7,823 |
| Abalone | 1,459 | 17,187 | 2,163 | 31,291 |
| Crabmeat | 250 | 564 | 910 | 1,944 |
| Shrimp | 2,014 | 7,855 | 2,043 | 5,506 |
| Squid | 6,651 | 2,890 | 16,704 | 8,146 |
| Other fish and shellfish | 57,128 | 55,324 | 65,271 | 66,773 |
| Cured: | | | | |
| Cod | 8,283 | 10,634 | 3,888 | 4,046 |
| Salmon | 333 | 1,308 | 388 | 1,296 |
| Other | 5,103 | 14,136 | 22,405 | 26,261 |
| Roe: | | | | |
| Herring | 18,494 | 34,479 | 27,220 | 30,556 |
| Salmon | 17,647 | 90,147 | 18,408 | 72,729 |
| Other | 8,813 | 20,031 | 27,197 | 91,686 |
| Other fish and shellfish | 541 | 964 | 48,516 | 27,131 |
| ***Total edible fishery products*** | ***1,060,186*** | ***2,155,628*** | ***1,374,012*** | ***2,282,994*** |
| Nonedible fishery products: | | | | |
| Meal and scrap | 150,262 | 23,447 | 103,790 | 23,791 |
| Fish oils | 149,279 | 21,945 | 194,795 | 20,223 |
| Other | - | 73,575 | - | 2,379,834 |
| ***Total nonedible fishery products*** | - | ***118,967*** | - | ***2,423,848*** |
| ***Grand total*** | - | ***2,274,595*** | - | ***4,706,842*** |

Note:--Does not include U.S.-flag vessel catches transferred onto foreign vessels in the U.S. EEZ joint venture operations (see page 17).

Source:--U.S. Department of Commerce, Bureau of the Census.

## EXPORTS

### EDIBLE AND NONEDIBLE FISHERY PRODUCTS EXPORTS, 1989

| Continent and Country | Edible | | Nonedible | Total |
|---|---|---|---|---|
| | Thousand pounds | - - - - - -Thousand dollars- - - - - - | | |
| North America: | | | | |
| Canada | 120,387 | 195,820 | 379,377 | 575,197 |
| Mexico | 11,694 | 22,036 | 96,060 | 118,096 |
| Dominican Republic | 1,801 | 1,108 | 38,354 | 39,462 |
| Panama | 551 | 915 | 29,770 | 30,685 |
| Bahamas | 1,016 | 1,674 | 16,823 | 18,497 |
| Other | 8,195 | 11,595 | 90,170 | 101,765 |
| *Total* | *143,644* | *233,148* | *650,554* | *883,702* |
| South America: | | | | |
| Brazil | 39 | 92 | 19,315 | 19,407 |
| Venezuela | 36 | 89 | 15,995 | 16,084 |
| Chile | 163 | 438 | 14,132 | 14,570 |
| Colombia | 24 | 56 | 12,479 | 12,535 |
| Bolivia | 2 | 3 | 12,283 | 12,286 |
| Other | 694 | 571 | 30,500 | 31,071 |
| *Total* | *958* | *1,249* | *104,704* | *105,953* |
| Europe: | | | | |
| European Economic Community: | | | | |
| United Kingdom | 35,252 | 71,855 | 119,039 | 190,894 |
| Netherlands | 10,875 | 16,379 | 112,014 | 128,393 |
| France | 28,357 | 53,753 | 73,740 | 127,493 |
| Fed. Rep of Germany | 5,052 | 10,320 | 73,461 | 83,781 |
| Italy | 14,278 | 21,322 | 58,464 | 79,786 |
| Other | 53,061 | 50,001 | 99,390 | 149,391 |
| *Total* | *146,875* | *223,630* | *536,108* | *759,738* |
| Other: | | | | |
| Switzerland | 834 | 2,512 | 110,065 | 112,577 |
| Sweden | 10,868 | 24,517 | 8,523 | 33,040 |
| Norway | 6,199 | 5,959 | 5,530 | 11,489 |
| USSR | 73,914 | 4,342 | 2,495 | 6,837 |
| Austria | 5 | 19 | 4,202 | 4,221 |
| Other | 2,579 | 4,048 | 10,662 | 14,710 |
| *Total* | *94,399* | *41,397* | *141,477* | *182,874* |
| Asia: | | | | |
| Japan | 853,222 | 1,603,662 | 371,533 | 1,975,195 |
| Hong Kong | 7,508 | 26,023 | 136,229 | 162,252 |
| Republic of Korea | 63,559 | 67,087 | 82,638 | 149,725 |
| Iraq | - | - | 92,722 | 92,722 |
| Taiwan | 23,819 | 36,796 | 50,717 | 87,513 |
| Other | 16,940 | 25,026 | 173,724 | 198,750 |
| *Total* | *965,048* | *1,758,594* | *907,563* | *2,666,157* |
| Australia and Oceania: | | | | |
| Australia | 12,245 | 20,187 | 49,226 | 69,413 |
| New Zealand | 290 | 562 | 8,515 | 9,077 |
| French Polynesia | 367 | 584 | 915 | 1,499 |
| Fiji | 2,908 | 575 | 351 | 926 |
| Fed Sts. of Micronesia | 146 | 99 | 427 | 526 |
| Other | 422 | 216 | 785 | 1,001 |
| *Total* | *16,378* | *22,223* | *60,219* | *82,442* |
| Africa: | | | | |
| Rep. of South Africa | 1,091 | 1,030 | 12,656 | 13,686 |
| Egypt | 5,508 | 1,558 | 2,843 | 4,401 |
| Nigeria | 5 | 11 | 2,771 | 2,782 |
| Ghana | - | - | 618 | 618 |
| Mauritius | - | - | 599 | 599 |
| Other | 106 | 154 | 3,736 | 3,890 |
| *Total* | *6,710* | *2,753* | *23,223* | *25,976* |
| *Grand total* | *1,374,012* | *2,282,994* | *2,423,848* | *4,706,842* |

Source:--U.S. Department of Commerce, Bureau of the Census.

# FOREIGN TRADE

## EXPORTS

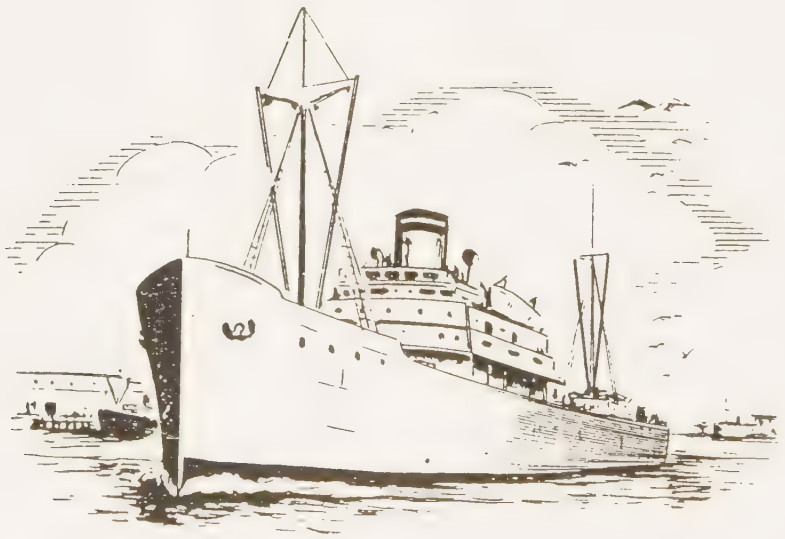
### DOMESTIC FISHERY PRODUCTS EXPORTS, 1980-89

| Year | Edible | | Nonedible | Total |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | | |
| 1980 | 573,896 | 904,363 | 101,791 | 1,006,154 |
| 1981 | 669,272 | 1,072,765 | 84,230 | 1,156,995 |
| 1982 | 657,246 | 998,873 | 60,011 | 1,058,884 |
| 1983 | 601,913 | 907,688 | 113,804 | 1,021,492 |
| 1984 | 574,124 | 842,349 | 106,490 | 948,839 |
| 1985 | 648,146 | 1,010,268 | 73,846 | 1,084,114 |
| 1986 | 735,026 | 1,289,807 | 66,289 | 1,356,096 |
| 1987 | 782,935 | 1,577,609 | 82,764 | 1,660,373 |
| 1988 | 1,060,186 | 2,155,628 | 118,967 | 2,274,595 |
| 1989 | *1,374,012 | *2,282,994 | *2,423,848 | *4,706,842 |

*Record.

NOTE:--The increase in the nonedible value for 1989 is due to a re-examination of commodities that are considered to be based on fishery products including fish, shellfish, aquatic plants and animals and any products thereof, including processed and manufactured products.

Source:--U.S. Department of Commerce, Bureau of the Census.



# FOREIGN TRADE

## EXPORTS

### DOMESTIC AND FOREIGN SHRIMP PRODUCTS EXPORTS, 1988 AND 1989

| Item | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Fresh and frozen: | | | | |
| Domestic | 22,116 | 78,043 | 20,802 | 67,537 |
| Foreign | 4,183 | 14,725 | 5,889 | 22,948 |
| *Total* | *26,299* | *92,768* | *26,691* | *90,485* |
| Canned: | | | | |
| Domestic | 2,014 | 7,855 | 2,043 | 5,506 |
| Foreign | 173 | 552 | 85 | 184 |
| *Total* | *2,187* | *8,407* | *2,128* | *5,690* |
| Total: | | | | |
| Domestic | 24,130 | 85,898 | 22,845 | 73,043 |
| Foreign | 4,356 | 15,277 | 5,974 | 23,132 |
| *Total* | *28,486* | *101,175* | *28,819* | *96,175* |

Source:--U.S. Department of Commerce, Bureau of the Census.

### DOMESTIC FRESH AND FROZEN SHRIMP EXPORTS, BY COUNTRY OF DESTINATION, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Canada | 6,633 | 25,318 | 8,525 | 28,486 |
| Mexico | 6,973 | 21,008 | 4,987 | 12,072 |
| Japan | 3,548 | 14,040 | 2,104 | 8,824 |
| Sweden | 1,240 | 3,791 | 753 | 3,005 |
| Norway | 438 | 1,574 | 946 | 2,480 |
| Thailand | 31 | 109 | 403 | 2,098 |
| United Kingdom | 992 | 3,708 | 599 | 1,869 |
| Hong Kong | 739 | 1,467 | 639 | 1,476 |
| Bermuda | 174 | 1,036 | 250 | 1,356 |
| Other | 1,348 | 5,992 | 1,596 | 5,871 |
| *Total* | *22,116* | *78,043* | *20,802* | *67,537* |

Source:--U.S. Department of Commerce, Bureau of the Census.

### DOMESTIC CANNED SHRIMP EXPORTS, BY COUNTRY OF DESTINATION, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Canada | 778 | 3,290 | 657 | 1,642 |
| Greece | - | - | 343 | 797 |
| Thailand | 293 | 1,238 | 246 | 776 |
| China | - | - | 132 | 481 |
| Switzerland | 125 | 444 | 158 | 444 |
| Hong Kong | 60 | 168 | 115 | 288 |
| Federal Republic of Germany | 95 | 248 | 104 | 285 |
| Indonesia | 7 | 32 | 54 | 138 |
| Dominican Republic | 3 | 9 | 27 | 101 |
| Other | 653 | 2,426 | 207 | 554 |
| *Total* | *2,014* | *7,855* | *2,043* | *5,506* |

Source:--U.S. Department of Commerce, Bureau of the Census.

# FOREIGN TRADE

## EXPORTS

### DOMESTIC FRESH AND FROZEN SALMON EXPORTS, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Japan | 238,273 | 702,199 | 260,950 | 627,478 |
| Canada | 13,717 | 28,154 | 37,513 | 48,991 |
| France | 14,464 | 40,592 | 10,290 | 17,660 |
| United Kingdom | 8,859 | 17,396 | 8,486 | 15,753 |
| Sweden | 1,426 | 2,914 | 2,475 | 3,555 |
| Netherlands | 547 | 1,632 | 1,657 | 2,691 |
| Belgium | 1,284 | 4,909 | 1,126 | 2,296 |
| Denmark | 3,573 | 7,597 | 1,297 | 2,053 |
| Federal Republic of Germany | 1,713 | 4,246 | 994 | 1,644 |
| Other | 8,544 | 16,295 | 3,769 | 6,136 |
| *Total* | *292,400* | *825,934* | *328,557* | *728,257* |

Source:--U.S. Department of Commerce, Bureau of the Census.

### DOMESTIC FRESH AND FROZEN SALMON EXPORTS, FILLETS, STEAKS OR PORTIONS, BY COUNTRY OF DESTINATION, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Japan | 531 | 1,127 | 6,024 | 13,444 |
| Canada | 581 | 1,480 | 888 | 2,063 |
| France | 319 | 1,204 | 1,088 | 1,885 |
| Denmark | 2 | 8 | 293 | 595 |
| Switzerland | - | - | 113 | 203 |
| Belgium | 80 | 218 | 115 | 194 |
| Sweden | 22 | 66 | 49 | 124 |
| Thailand | - | - | 42 | 105 |
| United Kingdom | 65 | 97 | 58 | 81 |
| Other | 115 | 257 | 148 | 312 |
| *Total* | *1,715* | *4,457* | *8,818* | *19,006* |

Source:--U.S. Department of Commerce, Bureau of the Census.

### DOMESTIC CANNED SALMON EXPORTS, BY COUNTRY OF DESTINATION, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| United Kingdom | 16,992 | 51,449 | 19,896 | 46,336 |
| Canada | 5,172 | 13,051 | 7,921 | 17,538 |
| Australia | 6,105 | 14,988 | 7,257 | 15,969 |
| Netherlands | 2,548 | 6,882 | 2,848 | 5,308 |
| Belgium | 761 | 2,030 | 913 | 1,606 |
| Japan | 573 | 1,636 | 133 | 421 |
| Hong Kong | 40 | 90 | 259 | 393 |
| New Zealand | 90 | 184 | 190 | 366 |
| Israel | - | - | 131 | 234 |
| Other | 619 | 1,258 | 867 | 1,549 |
| *Total* | *32,900* | *91,568* | *40,415* | *89,720* |

Source:--U.S. Department of Commerce, Bureau of the Census.

## EXPORTS

### DOMESTIC FRESH AND FROZEN CRAB EXPORTS, BY COUNTRY OF DESTINATION, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Japan | 62,492 | 220,396 | 76,105 | 230,685 |
| Canada | 2,174 | 8,793 | 3,371 | 9,547 |
| Republic of Korea | 3,804 | 11,430 | 1,495 | 3,653 |
| Federal Republic of Germany | 78 | 259 | 106 | 622 |
| Hong Kong | 10 | 46 | 76 | 446 |
| United Kingdom | 23 | 88 | 75 | 307 |
| Taiwan | 18 | 74 | 226 | 270 |
| Italy | 51 | 64 | 46 | 172 |
| Mexico | 37 | 50 | 51 | 120 |
| Other | 263 | 1,183 | 117 | 470 |
| *Total* | *68,950* | *242,383* | *81,668* | *246,292* |

Source:--U.S. Department of Commerce, Bureau of the Census.

### DOMESTIC FRESH AND FROZEN CRABMEAT EXPORTS, BY COUNTRY OF DESTINATION, 1988 AND 1989 (1)

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Japan | - | - | 922 | 3,486 |
| Canada | - | - | 277 | 673 |
| Federal Republic of Germany | - | - | 19 | 197 |
| Sweden | - | - | 70 | 163 |
| Republic of Korea | - | - | 96 | 120 |
| Mexico | - | - | 41 | 119 |
| United Kingdom | - | - | 71 | 107 |
| Hong Kong | - | - | 21 | 95 |
| Taiwan | - | - | 129 | 86 |
| Other | - | - | 121 | 316 |
| *Total* | - | - | *1,767* | *5,362* |

(1) Specific export codes not assigned prior to 1989.
Source:--U.S. Department of Commerce, Bureau of the Census.

### DOMESTIC FRESH AND FROZEN HERRING EXPORTS, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Japan | 65,660 | 70,431 | 48,560 | 33,549 |
| Republic of Korea | 3,352 | 3,184 | 6,751 | 4,921 |
| USSR | - | - | 23,120 | 3,365 |
| Canada | 5,454 | 2,879 | 2,575 | 1,109 |
| Mexico | 6 | 6 | 11 | 10 |
| Australia | - | - | 4 | 6 |
| Bahamas | - | - | 5 | 4 |
| Colombia | - | - | 1 | 2 |
| Other | 125 | 51 | 1 | 1 |
| *Total* | *74,597* | *76,551* | *81,028* | *42,967* |

Source:--U.S. Department of Commerce, Bureau of the Census.

# FOREIGN TRADE

## EXPORTS

### DOMESTIC FISH AND MARINE ANIMAL OIL EXPORTS, BY COUNTRY OF DESTINATION, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Netherlands | 130,978 | 16,971 | 164,740 | 15,838 |
| Republic of South Africa | 2,202 | 302 | 13,229 | 1,204 |
| Spain | 6,500 | 1,000 | 8,079 | 909 |
| Belgium | 2,183 | 224 | 5,675 | 433 |
| Norway | 152 | 516 | 261 | 308 |
| Australia | 65 | 72 | 88 | 264 |
| Dominican Republic | 85 | 22 | 606 | 223 |
| Taiwan | 10 | 27 | 221 | 199 |
| Japan | 111 | 234 | 118 | 161 |
| Other | 6,993 | 2,577 | 1,778 | 684 |
| *Total* | *149,279* | *21,945* | *194,795* | *20,223* |

Source:--U.S. Department of Commerce, Bureau of the Census.

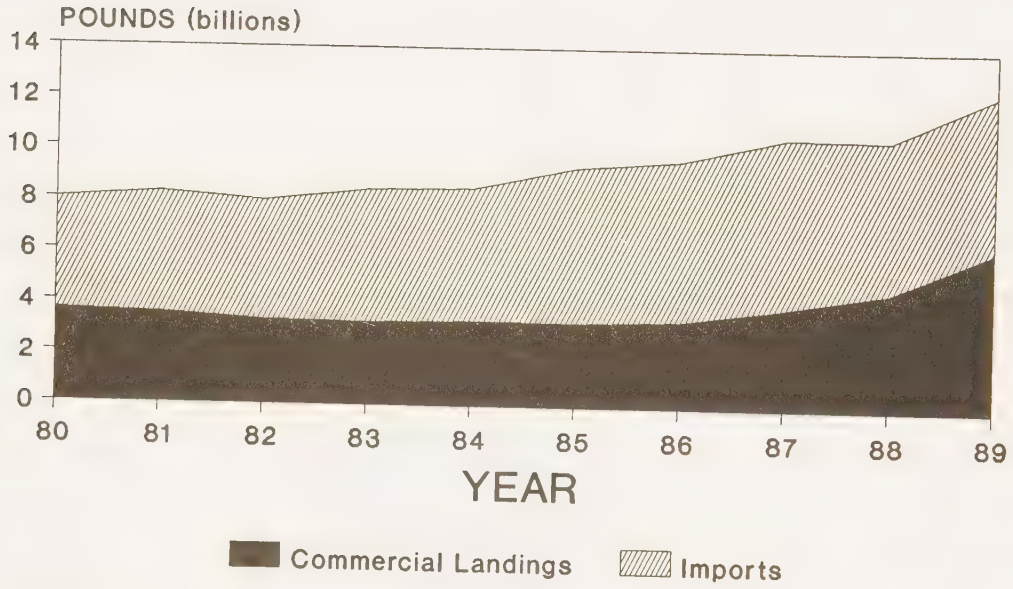
### DOMESTIC FISH MEAL EXPORTS, BY COUNTRY OF DESTINATION, 1988 AND 1989

| Country | 1988 | | 1989 | |
|---|---|---|---|---|
| | Thousand pounds | Thousand dollars | Thousand pounds | Thousand dollars |
| Taiwan | 32,876 | 5,475 | 27,196 | 8,414 |
| Canada | 24,734 | 3,466 | 10,580 | 4,828 |
| Japan | 6,256 | 1,010 | 8,051 | 3,000 |
| Thailand | 2,932 | 409 | 1,246 | 1,281 |
| Hong Kong | 260 | 44 | 2,110 | 816 |
| Indonesia | 4,334 | 111 | 265 | 765 |
| Mexico | 1,214 | 77 | 855 | 723 |
| Ecuador | 4,012 | 492 | 657 | 677 |
| Honduras | 2,754 | 302 | 907 | 594 |
| Other | 70,890 | 12,061 | 51,923 | 2,693 |
| *Total* | *150,262* | *23,447* | *103,790* | *23,791* |

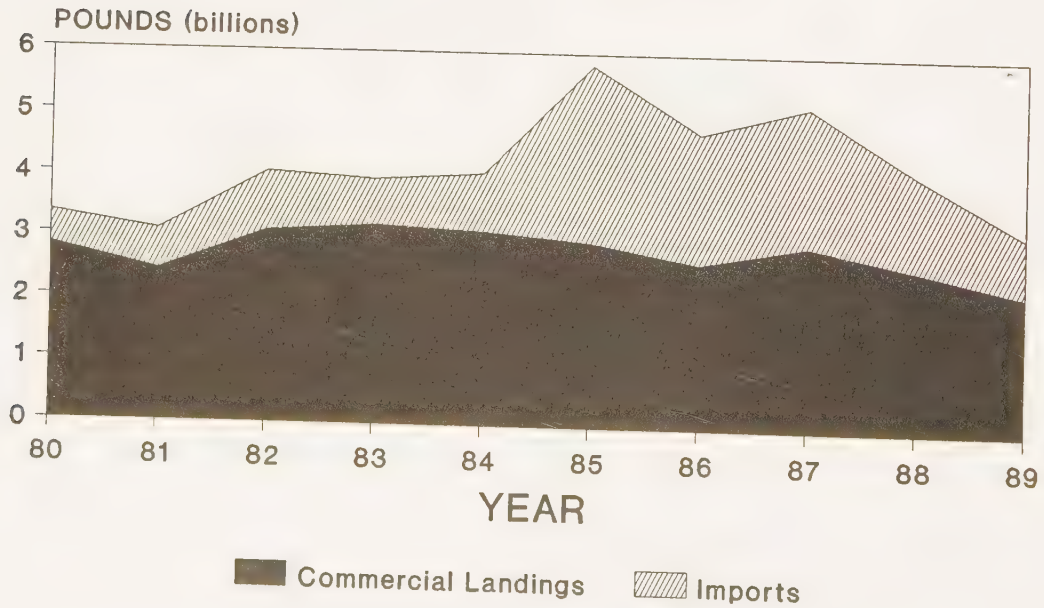
Source:--U.S. Department of Commerce, Bureau of the Census.

# U.S. Exports of Edible Fishery Products, 1989
## (Total Exports $2,283.0 million)

## SUPPLY OF EDIBLE FISHERY PRODUCTS (ROUND WEIGHT) 1980 - 1989




## SUPPLY OF INDUSTRIAL FISHERY PRODUCTS (ROUND WEIGHT) 1980 - 1989



## U.S. SUPPLY OF EDIBLE AND INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1980-89
(Round weight)

| Year | Domestic commercial landings (1) | | Imports (2) | | Total |
|---|---|---|---|---|---|
| | Million pounds | Percent | Million pounds | Percent | Million pounds |
| 1980 | 6,482 | 57.1 | 4,875 | 42.9 | 11,357 |
| 1981 | 5,977 | 52.6 | 5,376 | 47.4 | 11,353 |
| 1982 | 6,367 | 53.0 | 5,644 | 47.0 | 12,011 |
| 1983 | 6,439 | 52.1 | 5,913 | 47.9 | 12,352 |
| 1984 | 6,438 | 51.3 | 6,114 | 48.7 | 12,552 |
| 1985 | 6,258 | 41.3 | 8,892 | 58.7 | 15,150 |
| 1986 | 6,031 | 42.0 | 8,337 | 58.0 | 14,368 |
| 1987 | 6,896 | 43.8 | 8,848 | 56.2 | 15,744 |
| 1988 | 7,192 | 49.2 | 7,436 | 50.8 | 14,628 |
| 1989 | *8,463 | 54.7 | 7,022 | 45.3 | 15,485 |

(1) Preliminary.
(2) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa.
*Record. Records--1968 imports: 13,221,000,000 lb; 1968 total: 17,381,000,000 lb.

Note:--The weights of U.S. landings and imports represent the round (live) weight of all items except univalve and bivalve mollusks (conchs, clams, oysters, scallops, etc.) which are shown in weight of meats (excluding the shell).

## U.S. SUPPLY OF EDIBLE COMMERCIAL FISHERY PRODUCTS, 1980-89
(Round weight)

| Year | Domestic commercial landings (1) | | Imports (2) | | Total |
|---|---|---|---|---|---|
| | Million pounds | Percent | Million pounds | Percent | Million pounds |
| 1980 | 3,654 | 45.6 | 4,352 | 54.4 | 8,006 |
| 1981 | 3,547 | 42.9 | 4,720 | 57.1 | 8,267 |
| 1982 | 3,285 | 41.2 | 4,683 | 58.8 | 7,968 |
| 1983 | 3,238 | 38.5 | 5,175 | 61.5 | 8,413 |
| 1984 | 3,320 | 39.1 | 5,178 | 60.9 | 8,498 |
| 1985 | 3,294 | 35.3 | 6,043 | 64.7 | 9,337 |
| 1986 | 3,393 | 35.3 | 6,227 | 64.7 | 9,620 |
| 1987 | 3,946 | 37.4 | *6,615 | 62.6 | 10,561 |
| 1988 | 4,588 | 43.7 | 5,917 | 56.3 | 10,505 |
| 1989 | *6,204 | 50.8 | 6,064 | 49.2 | *12,268 |

(1) Preliminary.
(2) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa. *Record.

## U.S. SUPPLY OF INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1980-89
(Round weight)

| Year | Domestic commercial landings (1) | | Imports | | Total |
|---|---|---|---|---|---|
| | Million pounds | Percent | Million pounds | Percent | Million pounds |
| 1980 | 2,828 | 84.4 | 523 | 15.6 | 3,351 |
| 1981 | 2,430 | 78.7 | 656 | 21.3 | 3,086 |
| 1982 | 3,082 | 76.2 | 961 | 23.8 | 4,043 |
| 1983 | *3,201 | 81.3 | 738 | 18.7 | 3,939 |
| 1984 | 3,118 | 76.9 | 936 | 23.1 | 4,054 |
| 1985 | 2,964 | 51.0 | 2,849 | 49.0 | 5,813 |
| 1986 | 2,638 | 55.6 | 2,110 | 44.4 | 4,748 |
| 1987 | 2,950 | 56.9 | 2,233 | 43.1 | 5,183 |
| 1988 | 2,604 | 63.2 | 1,519 | 36.8 | 4,123 |
| 1989 | 2,259 | 70.2 | 958 | 29.8 | 3,217 |

(1) Preliminary. *Record. Records--1968 imports: 9,989,000,000 lb; 1968 total: 11,802,000,000 lb

# SUPPLY OF FISHERY PRODUCTS

## U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1988 AND 1989

| Item | Domestic commercial landings | | Imports (1) | | Total | |
|---|---|---|---|---|---|---|
| | 1988 | 1989 | 1988 | 1989 | 1988 | 1989 |
| | Million pounds, round weight | | | | | |
| Edible fishery products: | | | | | | |
| Finfish | 3,306 | 4,897 | 4,480 | 4,838 | 7,786 | 9,735 |
| Shellfish | 1,282 | 1,307 | 1,437 | 1,226 | 2,719 | 2,533 |
| *Total* | *4,588* | *6,204* | *5,917* | *6,064* | *10,505* | *12,268* |
| Industrial fishery products: | | | | | | |
| Finfish | 2,599 | 2,249 | 1,519 | 958 | 4,118 | 3,207 |
| Shellfish | 5 | 10 | (2) | (2) | 5 | 10 |
| *Total* | *2,604* | *2,259* | *1,519* | *958* | *4,123* | *3,217* |
| Total: | | | | | | |
| Finfish | 5,905 | 7,146 | 5,999 | 5,796 | 11,904 | 12,942 |
| Shellfish | 1,287 | 1,317 | 1,437 | 1,226 | 2,724 | 2,543 |
| *Total* | *7,192* | *8,463* | *7,436* | *7,022* | *14,628* | *15,485* |

See footnotes below.

## VALUE OF U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1988 AND 1989

| Item | Domestic commercial landings | | Imports (1) | | Total | |
|---|---|---|---|---|---|---|
| | 1988 | 1989 | 1988 | 1989 | 1988 | 1989 |
| | Million dollars | | | | | |
| Edible fishery products: | | | | | | |
| Finfish | 1,872 | 1,610 | 2,676 | 2,859 | 4,548 | 4,469 |
| Shellfish | 1,490 | 1,501 | 2,730 | 2,598 | 4,220 | 4,099 |
| *Total* | *3,362* | *3,111* | *5,406* | *5,457* | *8,768* | *8,568* |
| Industrial fishery products: | | | | | | |
| Finfish | 151 | 116 | (3) 53 | (2) 32 | 203 | 135 |
| Shellfish | 7 | 11 | (2) | (2) | 7 | 11 |
| *Total* | *158* | *127* | *53* | *32* | *210* | *159* |
| Total: | | | | | | |
| Finfish | 2,023 | 1,726 | 2,729 | 2,891 | 4,752 | 4,617 |
| Shellfish | 1,497 | 1,512 | 2,730 | 2,598 | 4,227 | 4,110 |
| *Total* | *3,520* | *3,238* | *5,459* | *5,489* | *8,979* | *8,727* |

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa.
(2) Not available.
(3) Includes only quantity and value of fish meal and sea herring for industrial purposes.

Note:--Value of domestic commercial landings is exvessel value.

## U.S. SUPPLY OF REGULAR AND MINCED BLOCKS, 1980-89
(Edible weight)

| Year | U.S. production | | Imports | | Total supply |
|---|---|---|---|---|---|
| | Quantity | Percent of total supply | Quantity | Percent of total supply | Quantity |
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds |
| 1980 | 1,205 | 0.4 | 336,117 | 99.6 | 337,322 |
| 1981 | 1,029 | 0.3 | 344,111 | 99.7 | 345,140 |
| 1982 | 2,766 | 0.9 | 318,966 | 99.1 | 321,732 |
| 1983 | 5,155 | 1.3 | 384,458 | 98.7 | 389,613 |
| 1984 | 2,655 | 0.8 | 316,165 | 99.2 | 318,820 |
| 1985 | 2,551 | 0.8 | 334,060 | 99.2 | 336,611 |
| 1986 | 3,919 | 1.1 | 363,897 | 98.9 | 367,816 |
| 1987 | 13,559 | 3.3 | 403,577 | 96.7 | 417,136 |
| 1988 | *44,602 | 12.8 | 303,237 | 87.2 | 347,839 |
| 1989 | 30,898 | 9.8 | 283,278 | 90.2 | 314,176 |

*Record. Records--1979 imports: 408,152,000 lb; 1979 total supply: 413,009,000 lb.

## U.S. SUPPLY OF ALL FILLETS AND STEAKS, 1980-89
(Edible weight)

| Year | U.S. production (1) | | Imports | | Total supply |
|---|---|---|---|---|---|
| | Quantity | Percent of total supply | Quantity | Percent of total supply | Quantity |
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds |
| 1980 | 202,779 | 35.5 | 369,161 | 64.5 | 571,940 |
| 1981 | 205,225 | 33.1 | 414,163 | 66.9 | 619,388 |
| 1982 | 217,644 | 33.0 | 440,916 | 67.0 | 658,560 |
| 1983 | 230,649 | 34.4 | 439,716 | 65.6 | 670,365 |
| 1984 | 252,288 | 34.8 | 473,594 | 65.2 | 725,882 |
| 1985 | 245,525 | 31.4 | 536,725 | 68.6 | 782,250 |
| 1986 | 279,468 | 34.2 | 538,532 | 65.8 | 818,000 |
| 1987 | 356,081 | 36.4 | *620,985 | 63.6 | *977,066 |
| 1988 | 378,236 | 42.2 | 517,709 | 57.8 | 895,945 |
| 1989 | *389,594 | 42.9 | 517,618 | 57.1 | 907,212 |

(1) Includes fillets used to produce blocks. *Record.

## U.S. SUPPLY OF GROUNDFISH FILLETS AND STEAKS, 1980-89
(Edible weight)

| Year | U.S. production (1) | | Imports | | Total supply |
|---|---|---|---|---|---|
| | Quantity | Percent of total supply | Quantity | Percent of total supply | Quantity |
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds |
| 1980 | 67,221 | 23.3 | 220,954 | 76.7 | 288,175 |
| 1981 | 77,092 | 23.1 | 257,164 | 76.9 | 334,256 |
| 1982 | 70,994 | 19.4 | 295,193 | 80.6 | 366,187 |
| 1983 | 81,223 | 21.4 | 298,170 | 78.6 | 379,393 |
| 1984 | 94,943 | 23.6 | 307,852 | 76.4 | 402,795 |
| 1985 | 84,244 | 21.6 | 305,690 | 78.4 | 389,934 |
| 1986 | 107,008 | 27.2 | 287,099 | 72.8 | 394,107 |
| 1987 | 110,688 | 26.0 | *315,418 | 74.0 | *426,106 |
| 1988 | 88,156 | 25.8 | 253,187 | 74.2 | 341,343 |
| 1989 | 95,893 | 26.6 | 265,001 | 73.4 | 360,894 |

(1) Includes fillets used to produce blocks. Species include: cod, cusk, haddock, hake, Atlantic pollock, and Atlantic ocean perch. *Record. Record--1951 U.S. Production: 148,786,000 lb.

## U.S. COMMERCIAL LANDINGS AND IMPORTS OF TUNA, 1980-89

(Thousand pounds)

| Year | Domestic commercial landings | | | Imports | | |
|---|---|---|---|---|---|---|
| | Atlantic, Gulf Pacific Coast States, and Hawaii | Puerto Rico and American Samoa (1) | Total | Fresh and frozen including cooked loins and discs (2) | Canned | |
| | | | | | In oil | Not in oil |
| | (Round weight) | | | | Product weight | |
| 1980..... | 399,432 | 100,606 | 500,038 | 770,396 | 446 | 63,107 |
| 1981..... | 341,149 | 148,729 | 489,878 | 769,675 | 268 | 70,583 |
| 1982..... | 261,409 | 211,679 | 473,088 | 589,558 | 213 | 87,366 |
| 1983..... | 278,692 | 307,298 | 585,990 | 533,686 | 197 | 122,132 |
| 1984..... | 211,830 | 371,089 | 582,919 | 497,079 | 277 | 162,036 |
| 1985..... | 83,054 | 433,083 | 516,137 | 482,742 | 303 | 213,645 |
| 1986..... | 87,811 | 469,034 | 556,845 | 567,524 | 301 | 236,320 |
| 1987..... | 100,058 | 526,186 | 626,244 | 578,883 | 329 | 211,356 |
| 1988..... | 111,349 | 497,975 | 609,324 | 557,488 | 318 | 244,186 |
| 1989..... | 89,413 | 452,050 | 541,463 | 664,302 | 422 | *347,790 |

(1) Includes a quantity of fish landed at other ports by U.S.-flag vessels.

(2) Includes landings in American Samoa of foreign-caught fish.

*Record. Records--1976 domestic landings: 664,913,000 lb; 1978 imports: 870,259,000 lb.

## U.S. SUPPLY OF CANNED TUNA, 1980-89

(Canned weight)

| Year | Domestic production | | | | Imported Canned | | Total supply |
|---|---|---|---|---|---|---|---|
| | Albacore | | Lightmeat | | | | |
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds |
| 1980..... | 113,605 | 17.1 | 488,451 | 73.4 | 63,553 | 9.5 | 665,609 |
| 1981..... | 120,983 | 17.3 | 505,986 | 72.5 | 70,851 | 10.2 | 697,820 |
| 1982..... | 125,113 | 20.0 | 413,390 | 66.0 | 87,579 | 14.0 | 626,082 |
| 1983..... | 106,175 | 14.9 | 484,367 | 67.9 | 122,329 | 17.2 | 712,871 |
| 1984..... | 136,745 | 17.6 | 477,536 | 61.5 | 162,313 | 20.9 | 776,594 |
| 1985..... | 132,001 | 17.4 | 412,992 | 54.4 | 213,948 | 28.2 | 758,941 |
| 1986..... | 157,341 | 18.0 | 479,490 | 54.9 | 236,621 | 27.1 | 873,452 |
| 1987..... | 139,888 | 16.2 | 514,095 | 59.4 | 211,685 | 24.5 | 865,668 |
| 1988..... | 131,114 | 15.6 | 467,067 | 55.4 | 244,504 | 29.0 | 842,685 |
| 1989..... | 137,284 | 13.3 | 548,983 | 53.1 | *348,212 | 33.6 | *1,034,479 |

*Record. Record--1978 U.S.Pack: 704,793,000 lb.

## U.S. SUPPLY OF CANNED SARDINES, 1980-89
(Canned weight)

| Year | U.S. pack | Imports | | | Total | Exports | | Total supply |
|---|---|---|---|---|---|---|---|---|
| | | In oil | Not in oil | Total | | Domestic | Foreign | |
| | Thousand pounds | | | | | | | |
| 1980..... | 19,500 | 18,218 | 32,960 | 51,178 | 70,678 | 1,839 | 78 | 68,761 |
| 1981..... | 30,586 | 18,239 | 37,034 | 55,273 | 85,859 | 1,731 | 183 | 83,945 |
| 1982..... | 18,003 | 14,119 | 35,925 | 50,044 | 68,047 | 1,049 | 195 | 66,803 |
| 1983..... | 13,110 | 17,151 | 18,096 | 35,247 | 48,357 | 1,013 | 920 | 46,424 |
| 1984..... | 14,650 | 17,535 | 27,216 | 44,751 | 59,401 | 889 | 860 | 57,652 |
| 1985..... | 20,016 | 23,009 | 34,213 | 57,222 | 77,238 | 529 | 570 | 76,139 |
| 1986..... | 15,601 | 22,949 | 30,315 | 53,264 | 68,865 | 271 | 287 | 68,307 |
| 1987..... | 13,116 | 27,352 | 37,670 | 65,022 | 78,138 | 999 | 158 | 76,981 |
| 1988..... | 18,611 | 22,813 | 30,546 | 53,359 | 71,970 | 8,555 | 162 | 63,253 |
| 1989..... | 13,221 | 21,771 | 34,608 | 56,379 | 69,600 | 8,951 | 119 | 60,530 |

*Record--1974 imports: 69,137,000 lb.

## U.S. SUPPLY OF CANNED SALMON, 1980-89
(Canned weight)

| Year | U.S. pack | Imports | Total | Exports | | Total supply |
|---|---|---|---|---|---|---|
| | | | | Domestic | Foreign | |
| | Thousand pounds | | | | | |
| 1980..... | 200,003 | 167 | 200,170 | *74,006 | 58 | 126,106 |
| 1981..... | 214,855 | 71 | 214,926 | 63,494 | 201 | 151,231 |
| 1982..... | 112,100 | 158 | 112,258 | 41,156 | 111 | 70,991 |
| 1983..... | 181,166 | 277 | 181,443 | 54,488 | 422 | 126,533 |
| 1984..... | 198,926 | 551 | 199,477 | 48,963 | 245 | 150,269 |
| 1985..... | 158,943 | 1,958 | 160,901 | 48,240 | 39 | 112,622 |
| 1986..... | 141,756 | 4,622 | 146,378 | 59,434 | (1) | 86,944 |
| 1987..... | 105,206 | 6,652 | 111,858 | 35,901 | 207 | 75,750 |
| 1988..... | 88,419 | 3,528 | 91,947 | 32,900 | 93 | 58,954 |
| 1989..... | 197,044 | 2,943 | 199,987 | 40,415 | 82 | 159,490 |

(1) Less than 500 lb. *Records--1936 U.S. pack: 430,328,000 lb; 1959 imports: 31,154,000 lb.

## U.S. SUPPLY OF CLAM MEATS, 1980-89
(Meat weight)

| Year | U.S. commercial landings | | | | | Imports (1) | Exports | | Total supply |
|---|---|---|---|---|---|---|---|---|---|
| | Hard | Soft | Surf | Other | Total | | Domestic | Foreign | |
| | Thousand pounds | | | | | | | | |
| 1980... | 13,370 | 8,948 | 37,737 | 35,314 | 95,369 | 6,908 | (2) | (2) | 102,277 |
| 1981... | 18,118 | 8,072 | 46,100 | 48,341 | 120,631 | 9,520 | (2) | (2) | 130,151 |
| 1982... | 12,855 | 8,021 | 49,720 | 37,709 | 108,305 | 11,122 | (2) | (2) | 119,427 |
| 1983... | 14,186 | 8,460 | 55,938 | 36,821 | 115,405 | 11,006 | (2) | (2) | 126,411 |
| 1984... | 14,749 | 7,919 | 70,243 | 40,010 | 132,921 | 11,113 | (2) | (2) | 144,034 |
| 1985... | 16,697 | 7,865 | 72,520 | 53,469 | *150,551 | 12,979 | 931 | 40 | *162,559 |
| 1986... | 11,793 | 5,887 | 78,749 | 48,964 | 145,393 | 16,880 | 1,227 | 16 | 161,030 |
| 1987... | 11,418 | 7,469 | 60,744 | 54,726 | 134,357 | *17,641 | 1,146 | 11 | 150,841 |
| 1988... | 12,371 | 6,814 | 63,545 | 49,010 | 131,740 | 14,872 | 1,449 | 9 | 145,154 |
| 1989... | 9,278 | 6,829 | 67,072 | 54,987 | 138,166 | 13,254 | 1,757 | 106 | 149,557 |

(1) Imports and exports were converted to meat weight by using these conversion factors: 0.40, in shell or shucked; 0.30 canned chowder and juice; and 0.93, other. (2) Not reported. *Record.

## U.S. SUPPLY OF KING CRAB, 1980-89
(Round weight)

| Year | U.S. commercial landings | Exports (1) | | Total supply |
|---|---|---|---|---|
| | | Frozen | Canned | |
| | Thousand pounds | | | |
| 1980 | *185,624 | 50,525 | 1,988 | *133,111 |
| 1981 | 88,054 | 27,704 | 704 | 59,646 |
| 1982 | 38,492 | 8,958 | 1,071 | 28,463 |
| 1983 | 25,581 | 2,039 | 346 | 23,196 |
| 1984 | 17,204 | 3,521 | 448 | 13,235 |
| 1985 | 15,363 | 4,053 | 752 | 10,558 |
| 1986 | 25,909 | 6,941 | 267 | 18,701 |
| 1987 | 29,065 | 14,656 | 336 | 14,073 |
| 1988 | 20,973 | 9,189 | 1,332 | 10,452 |
| 1989 | 26,391 | (2) | 181 | (2) |

(1) Domestic merchandise. Converted to round (live) weight by using these conversion factors: 1.75, frozen; and 5.33, canned. (2) unavailable. *Record.

## U.S. SUPPLY OF SNOW (TANNER) CRABS, 1980-89
(Round weight)

| Year | U.S. commercial landings | Imports (1) | Total | Exports (2) | Total supply |
|---|---|---|---|---|---|
| | Thousand pounds | | | | |
| 1980 | 121,684 | 3,732 | 125,416 | 71,871 | *53,545 |
| 1981 | 107,474 | 3,460 | 110,934 | 68,156 | 42,778 |
| 1982 | 68,767 | 3,135 | 71,902 | 47,220 | 24,682 |
| 1983 | 61,077 | 3,362 | 64,439 | 34,415 | 30,024 |
| 1984 | 48,765 | 4,992 | 53,757 | 31,127 | 22,630 |
| 1985 | 85,742 | 6,572 | 92,314 | 47,436 | 44,878 |
| 1986 | 110,000 | 5,510 | 115,510 | 66,925 | 48,585 |
| 1987 | 113,812 | 7,706 | 121,518 | 92,312 | 29,206 |
| 1988 | 146,326 | 6,765 | 153,091 | *122,402 | 30,689 |
| 1989 | *164,643 | 2,575 | *167,218 | (3) | (3) |

(1) Converted to round (live) weight by multiplying canned weight by 5.00. (2) Domestic merchandise converted to round (live) weight by multiplying frozen weight by 2.13 (believed to be mostly sections). (3) Unavailable. *Record.

## U.S. SUPPLY OF CANNED CRABMEAT, 1980-89
(Canned weight)

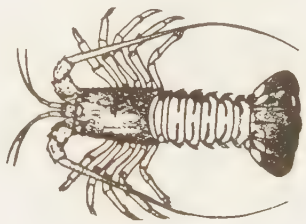
| Year | U.S. pack | Percent of total | Imports | Percent of total | Total | Exports | Total supply |
|---|---|---|---|---|---|---|---|
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds | | |
| 1980 | 3,916 | 43.9 | 5,002 | 56.1 | 8,918 | 373 | 8,545 |
| 1981 | 1,725 | 25.6 | 5,019 | 74.4 | 6,744 | 132 | 6,612 |
| 1982 | 1,349 | 19.0 | 5,737 | 81.0 | 7,086 | 201 | 6,885 |
| 1983 | 1,435 | 18.1 | 6,505 | 81.9 | 7,940 | 65 | 7,875 |
| 1984 | 1,084 | 14.8 | 6,233 | 85.2 | 7,317 | 84 | 7,233 |
| 1985 | 553 | 6.8 | 7,584 | 93.2 | 8,137 | 141 | 7,996 |
| 1986 | 591 | 6.3 | 8,778 | 93.7 | 9,369 | 50 | 9,319 |
| 1987 | 200 | 2.4 | 7,967 | 97.6 | 8,167 | 63 | 8,104 |
| 1988 | 359 | 4.4 | 7,720 | 95.6 | 8,079 | 250 | 7,829 |
| 1989 | 504 | 5.7 | 8,280 | 94.3 | 8,784 | 910 | 7,874 |

Records--1966 U.S. pack: 11,002,000 lb; 1939 imports: 13,507,000 lb.

## U.S. SUPPLY OF AMERICAN LOBSTERS,1980-89
(Round weight)

| Year | U.S. commercial landings | | Imports (1) | | | | Total supply |
|---|---|---|---|---|---|---|---|
| | | | Quantity | | | Percentage of total supply | |
| | Quantity | Percentage of total supply | Fresh and frozen | Canned | Total | | |
| | Thousand pounds | Percent | --------Thousand pounds--------- | | | Percent | Thousand pounds |
| 1980..... | 36,952 | 53.4 | 22,503 | 9,699 | 32,202 | 46.6 | 69,154 |
| 1981..... | 37,494 | 48.2 | 26,857 | 13,459 | 40,316 | 51.8 | 77,810 |
| 1982..... | 39,445 | 48.6 | 26,205 | 15,480 | 41,685 | 51.4 | 81,130 |
| 1983..... | 44,206 | 47.7 | 43,439 | 4,977 | 48,416 | 52.3 | 92,622 |
| 1984..... | 43,967 | 43.9 | 54,359 | 1,783 | 56,142 | 56.1 | 100,109 |
| 1985..... | 46,152 | 42.9 | 57,358 | 4,029 | 61,387 | 57.1 | 107,539 |
| 1986..... | 46,053 | 40.8 | 65,276 | 1,633 | 66,909 | 59.2 | 112,962 |
| 1987..... | 45,558 | 39.6 | 66,585 | 2,956 | 69,541 | 60.0 | 115,099 |
| 1988..... | 48,643 | 40.1 | 69,790 | 2,756 | *72,546 | 59.9 | 121,189 |
| 1989..... | *52,926 | 42.4 | 69,068 | 2,756 | 71,824 | 57.6 | *124,750 |

(1) Imports were converted to round (live) weight by using these conversion factors: 1.00, whole; 4.50, meat; and 4.64, canned. *Record.



## U.S. SUPPLY OF SPINY LOBSTERS,1980-89
(Round weight)

| Year | U.S. commercial landings | | Imports (1) | | | | Total supply |
|---|---|---|---|---|---|---|---|
| | | | Quantity | | | Percentage of total supply | |
| | Quantity | Percentage of total supply | Fresh and frozen | Canned | Total | | |
| | Thousand pounds | Percent | --------Thousand pounds--------- | | | Percent | Thousand pounds |
| 1980..... | 6,861 | 5.4 | 119,817 | 395 | 120,212 | 94.6 | 127,073 |
| 1981..... | 6,619 | 4.9 | 126,210 | 978 | 127,188 | 95.1 | 133,807 |
| 1982..... | 6,438 | 5.1 | 120,679 | 230 | 120,909 | 95.9 | 127,347 |
| 1983..... | 5,218 | 3.8 | 131,102 | 588 | 131,690 | 96.2 | 136,908 |
| 1984..... | 6,303 | 4.1 | 146,990 | 79 | 147,069 | 95.9 | 153,372 |
| 1985..... | 5,311 | 3.5 | 148,324 | 253 | 148,577 | 96.5 | 153,888 |
| 1986..... | 6,775 | 4.5 | 144,933 | 164 | 145,097 | 95.5 | 151,872 |
| 1987..... | 5,755 | 3.8 | 145,093 | 613 | 145,706 | 96.2 | 151,461 |
| 1988..... | 7,166 | 5.1 | 131,837 | 234 | 132,071 | 94.9 | 139,237 |
| 1989..... | 8,125 | 10.5 | 69,130 | 329 | 69,459 | 89.5 | 77,584 |

(1) Imports were converted to round (live) weight by using these conversion factors: 1.00, whole; 3.00, tails; 4.35, other; and 4.50 canned. *Records--1972 landings: 12,215,000 lb; 1976 imports: 168,095,000; and 1976 total supply: 173,738,000 lb.

# SUPPLY OF FISHERY PRODUCTS

## U.S. SUPPLY OF OYSTERS, 1980-89
(Meat weight)

| Year | U.S. commercial landings | | | Imports (2) | Total supply |
|---|---|---|---|---|---|
| | Eastern | Pacific (1) | Total | | |
| | Thousand pounds | | | | |
| 1980 | 44,132 | 6,694 | 50,826 | 21,732 | 72,558 |
| 1981 | 46,605 | 6,007 | 52,612 | 25,769 | 78,381 |
| 1982 | 48,820 | 7,369 | 56,189 | 27,529 | 83,718 |
| 1983 | 46,706 | 7,342 | 54,048 | 30,775 | 84,823 |
| 1984 | 46,035 | 8,739 | 54,774 | 36,086 | 90,860 |
| 1985 | 43,085 | 7,796 | 50,881 | 45,926 | 96,807 |
| 1986 | 39,140 | 9,629 | 48,769 | 50,038 | 98,807 |
| 1987 | 29,957 | 9,850 | 39,807 | *52,085 | 91,892 |
| 1988 | 23,916 | 7,976 | 31,892 | 46,414 | 78,306 |
| 1989 | 22,074 | 7,852 | 29,926 | 37,662 | 67,588 |

(1) Includes Western and Eastern oyster landings for Washington and California. (2) Imports were converted to meat weight by using these conversion factors: 0.93, canned; 3.12, canned smoked; and 0.75, other. *Record. Record - 1908 landings: 152,046,000 lb.

## U.S. SUPPLY OF SCALLOP MEATS, 1980-89
(Meat weight)

| Year | U.S. commercial landings | | | | Imports | Total supply |
|---|---|---|---|---|---|---|
| | Bay | Calico | Sea | Total | | |
| | Thousand pounds | | | | | |
| 1980 | 968 | - | 28,752 | 29,720 | 20,885 | 50,605 |
| 1981 | 670 | 14,641 | 30,277 | 45,588 | 26,227 | 71,815 |
| 1982 | 1,780 | 11,010 | 21,325 | 34,115 | 20,860 | 54,975 |
| 1983 | 2,338 | 9,606 | 20,478 | 32,422 | 34,280 | 66,702 |
| 1984 | 1,728 | 39,330 | 18,427 | *59,485 | 27,270 | *86,755 |
| 1985 | 1,331 | 12,513 | 15,829 | 29,673 | 42,035 | 71,708 |
| 1986 | 735 | 1,616 | 19,992 | 22,343 | *47,916 | 70,259 |
| 1987 | 580 | 8,155 | 32,038 | 40,773 | 39,934 | 80,707 |
| 1988 | 569 | 11,868 | 30,557 | 42,994 | 32,039 | 75,033 |
| 1989 | 274 | 6,[illegible] | 33,757 | 40,611 | 40,874 | 81,485 |

*Record.

## U.S. SUPPLY OF ALL FORMS OF SHRIMP, 1980-89
(Heads-off weight)

| Year | U.S. Commercial landings | Imports (1) | Total | Exports (2) | | | | Total supply |
|---|---|---|---|---|---|---|---|---|
| | | | | Fresh and frozen | | Canned | | |
| | | | | Domestic | Foreign | Domestic | Foreign | |
| | Thousand pounds | | | | | | | |
| 1980.... | 207,869 | 258,069 | 465,938 | 18,777 | 9,567 | 11,781 | *935 | 424,878 |
| 1981.... | 218,900 | 259,112 | 478,012 | 20,777 | 13,687 | 9,181 | 78 | 434,289 |
| 1982.... | 175,613 | 319,596 | 495,209 | 18,350 | 12,738 | 6,064 | 45 | 458,012 |
| 1983.... | 155,591 | 421,179 | 576,770 | 21,776 | 6,560 | 7,573 | 28 | 540,833 |
| 1984.... | 188,132 | 422,340 | 610,472 | 15,961 | 5,069 | 5,478 | 83 | 583,881 |
| 1985.... | 207,239 | 452,232 | 659,471 | 17,708 | 5,735 | 3,159 | 338 | 632,531 |
| 1986.... | 244,409 | 492,005 | 736,414 | 23,650 | 2,548 | 3,967 | 285 | 705,964 |
| 1987.... | 223,514 | 583,030 | *806,544 | 25,938 | 2,947 | 4,714 | 214 | *772,731 |
| 1988.... | 203,350 | *598,210 | 801,560 | 26,097 | 4,183 | 4,068 | 436 | 766,776 |
| 1989.... | 215,825 | 563,523 | 779,348 | 25,658 | 6,057 | 4,127 | 214 | 743,292 |

(1) Imports were converted to heads-off weight by using these conversion factors: 0.63, breaded; 1.00, shell-on; 1.28, peeled raw; 2.52, canned; and 2.40, other. (2) Exports were converted to heads-off weight by using these conversion factors: domestic--fresh and frozen, 1.18 and canned 2.02; foreign--fresh frozen, 1.00 and canned, 2.52.

*Record. Records--1977 U.S. commerical landings: 288,443,000 lb (heads off); 1973 fresh and frozen domestic exports: 44,172,000 lb; 1970 fresh and frozen foreign exports: 14,699,000 lb; and 1973 domestic canned: 20,097,000 lb.

## U.S. SUPPLY OF CANNED SHRIMP, 1980-89
(Canned weight)

| Year | U.S. pack | Percent of total | Imports | Percent of total | Total | Exports | | Total supply |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Domestic | Foreign | |
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds | | | |
| 1980.... | 15,289 | 78.3 | 4,225 | 21.7 | 19,514 | 5,832 | *371 | 13,311 |
| 1981.... | 9,693 | 68.9 | 4,383 | 31.1 | 14,076 | 4,545 | 31 | 9,500 |
| 1982.... | 6,276 | 54.1 | 5,332 | 45.9 | 11,608 | 3,002 | 18 | 8,588 |
| 1983.... | 6,723 | 33.8 | 13,176 | 66.2 | 19,899 | 3,749 | 11 | 16,139 |
| 1984.... | 7,246 | 34.8 | 13,580 | 65.2 | 20,826 | 2,712 | 33 | 18,081 |
| 1985.... | 4,001 | 19.0 | 17,088 | 81.0 | 21,089 | 1,564 | 134 | 19,391 |
| 1986.... | 4,596 | 22.6 | 15,757 | 77.4 | 20,353 | 1,964 | 113 | 18,276 |
| 1987.... | 4,382 | 20.4 | 17,132 | 79.6 | 21,514 | 2,334 | 85 | 19,095 |
| 1988.... | 4,476 | 24.0 | 14,138 | 76.0 | 18,614 | 2,014 | 173 | 16,427 |
| 1989.... | 2,623 | 18.8 | 11,315 | 81.2 | 13,938 | 2,043 | 85 | 11,810 |

*Record. Records--1973 U.S. pack: 25,228,000 lb; 1970 total: 29,001,000 lb; 1973 domestic exports: 9,949,000 lb.

# SUPPLY OF FISHERY PRODUCTS

## U.S. SUPPLY OF FISH MEAL AND SOLUBLES, 1980-89
(Product weight)

| Year | Domestic production (1) | | Imports (2) | | Total |
|---|---|---|---|---|---|
| | Thousand pounds | Percent | Thousand pounds | Percent | Thousand pounds |
| 1980 | 857,526 | 89.6 | 99,074 | 10.4 | 956,600 |
| 1981 | 765,640 | 86.6 | 118,868 | 13.4 | 884,508 |
| 1982 | 899,356 | 84.2 | 168,664 | 15.8 | 1,068,020 |
| 1983 | *922,040 | 87.2 | 135,880 | 12.8 | 1,057,920 |
| 1984 | 877,566 | 84.0 | 166,888 | 16.0 | 1,044,454 |
| 1985 | 883,196 | 63.4 | 510,654 | 36.6 | 1,393,850 |
| 1986 | 799,826 | 68.3 | 370,548 | 31.7 | 1,170,374 |
| 1987 | 911,622 | 69.8 | 393,730 | 30.2 | 1,305,352 |
| 1988 | 755,520 | 74.0 | 265,310 | 26.0 | 1,020,830 |
| 1989 | 734,736 | 81.1 | 171,112 | 18.9 | 905,848 |

(1) Includes shellfish meal production plus the production of U.S. solubles. (2) Data do not include imports of fish solubles. *Record. Records--1968 imports: 1,712,344,000 lb, 1968 total supply: 2,254,450,000 lb.

Note:--Wet weight of solubles has been converted to dry weight by reducing its poundage by one-half.

## U.S. SUPPLY OF FISH MEAL, 1980-89
(Product weight)

| Year | Domestic production (1) | Imports | Total | Exports | |
|---|---|---|---|---|---|
| | | | | Domestic | Foreign |
| | Thousand pounds | | | | |
| 1980 | 723,844 | 99,074 | 822,918 | 170,562 | 2,942 |
| 1981 | 637,018 | 118,868 | 755,886 | 94,054 | 5,384 |
| 1982 | 746,854 | 168,664 | 915,518 | 35,880 | 4,662 |
| 1983 | 763,536 | 135,880 | 899,416 | 154,834 | 6,848 |
| 1984 | 751,528 | 166,888 | 918,416 | 40,356 | 1,234 |
| 1985 | 721,682 | 510,654 | 1,232,336 | 69,166 | 808 |
| 1986 | 702,194 | 370,548 | 1,072,742 | 77,020 | 952 |
| 1987 | *786,978 | 393,730 | 1,180,962 | 103,422 | 664 |
| 1988 | 643,796 | 265,310 | 909,106 | 150,262 | 3,684 |
| 1989 | 618,382 | 171,112 | 789,494 | 103,790 | 3,560 |

(1) Includes shellfish meal. *Record. Records--1968 imports: 1,710,570,000 lb; 1968 total supply 2,180,842,000 lb.

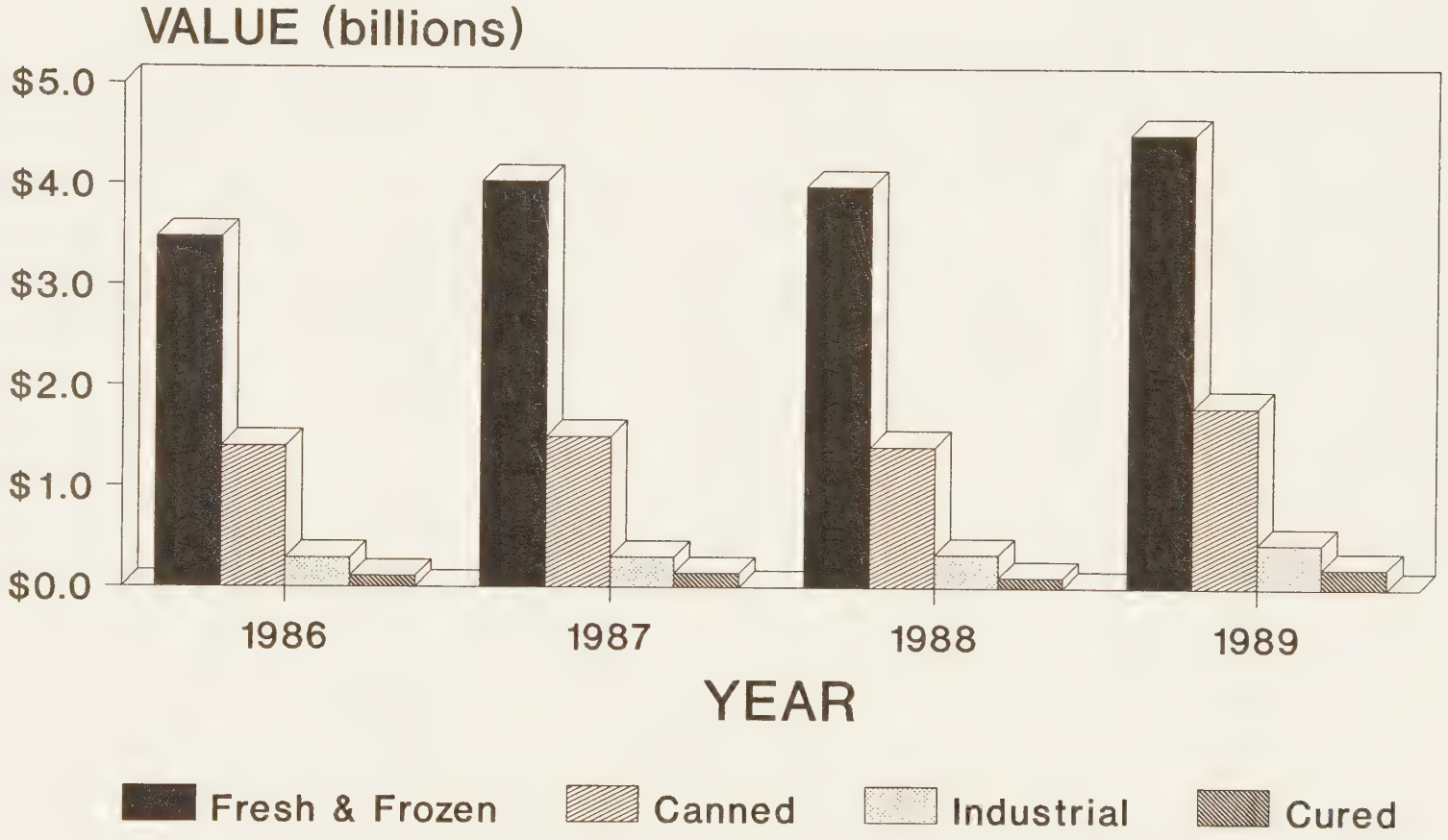
## U.S. SUPPLY OF FISH OILS, 1980-89

| Year | Domestic production | Imports | Total | Exports | Total supply |
|---|---|---|---|---|---|
| | Thousand pounds | | | | |
| 1980 | 312,511 | 21,350 | 333,861 | 284,009 | 49,852 |
| 1981 | 184,302 | 18,255 | 202,557 | 238,308 | (1) |
| 1982 | 347,513 | 12,699 | 360,212 | 202,345 | 157,867 |
| 1983 | *399,334 | 15,334 | 414,668 | *404,087 | 10,581 |
| 1984 | 372,804 | 13,426 | 386,230 | 399,425 | (1) |
| 1985 | 285,077 | 17,254 | 302,331 | 279,080 | 23,251 |
| 1986 | 336,708 | 19,212 | 355,920 | 192,214 | 163,706 |
| 1987 | 298,496 | 25,697 | 324,193 | 249,119 | 75,074 |
| 1988 | 224,733 | 27,667 | 252,400 | 149,279 | 103,121 |
| 1989 | 225,486 | 25,449 | 250,935 | 194,795 | 56,140 |

(1) The 1981 and 1984 exports, which included prior year stocks, exceed domestic production plus imports. *Record.

Note:--Does not include exports of foreign merchandise.

# VALUE OF PROCESSED FISHERY PRODUCTS FROM DOMESTIC CATCH & IMPORTED PRODUCTS 1986 - 1989



# PER CAPITA

## U.S. CONSUMPTION

Annual per capita consumption of seafood products represents the pounds of edible meat consumed from domestically-caught and imported fish and shellfish adjusted for beginning and ending inventories, and exports, divided by the civilian population of the United States as of July 1 of each year.

### U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-89 (1)

| Year | Civilian resident population July 1 (2) | Per capita consumption | | | |
|---|---|---|---|---|---|
| | | Fresh and frozen (3) | Canned (4) | Cured (5) | Total |
| | Million persons | Pounds, edible meat | | | |
| 1909 (6) | 90.5 | 4.3 | 2.7 | *4.0 | 11.0 |
| 1910 | 92.2 | 4.5 | 2.8 | 3.9 | 11.2 |
| 1911 | 93.9 | 4.8 | 2.8 | 3.7 | 11.3 |
| 1912 | 95.3 | 5.0 | 2.9 | 3.4 | 11.3 |
| 1913 | 97.2 | 5.3 | 2.9 | 3.3 | 11.5 |
| 1914 | 99.1 | 5.6 | 3.0 | 3.1 | 11.7 |
| 1915 | 100.5 | 5.8 | 2.4 | 3.0 | 11.2 |
| 1916 | 102.0 | 6.0 | 2.2 | 2.8 | 11.0 |
| 1917 | 103.3 | 6.2 | 2.0 | 2.7 | 10.9 |
| 1918 | 103.2 | 6.4 | 2.0 | 2.5 | 10.9 |
| 1919 | 104.5 | 6.4 | 2.8 | 2.4 | 11.6 |
| 1920 | 106.5 | 6.3 | 3.2 | 2.3 | 11.8 |
| 1921 | 108.5 | 6.2 | 2.2 | 2.1 | 10.5 |
| 1922 | 110.0 | 6.1 | 3.2 | 2.0 | 11.3 |
| 1923 | 111.9 | 6.0 | 2.9 | 1.8 | 10.7 |
| 1924 | 114.1 | 6.1 | 3.2 | 1.7 | 11.0 |
| 1925 | 115.8 | 6.3 | 3.2 | 1.6 | 11.1 |
| 1926 | 117.4 | 6.6 | 3.4 | 1.4 | 11.4 |
| 1927 | 119.0 | 7.0 | 3.9 | 1.3 | 12.2 |
| 1928 | 120.5 | 7.1 | 3.9 | 1.1 | 12.1 |
| 1929 | 121.8 | 6.9 | 3.9 | 1.1 | 11.9 |
| 1930 | 122.9 | 5.8 | 3.4 | 1.0 | 10.2 |
| 1931 | 123.9 | 4.9 | 3.2 | 0.7 | 8.8 |
| 1932 | 124.7 | 4.3 | 3.4 | 0.7 | 8.4 |
| 1933 | 125.4 | 4.2 | 3.9 | 0.6 | 8.7 |
| 1934 | 126.2 | 4.3 | 4.2 | 0.7 | 9.2 |
| 1935 | 127.1 | 5.1 | 4.7 | 0.7 | 10.5 |
| 1936 | 127.9 | 5.2 | *5.8 | 0.7 | 11.7 |
| 1937 | 128.6 | 5.6 | 5.3 | 0.9 | 11.8 |
| 1938 | 129.6 | 5.2 | 4.8 | 0.8 | 10.8 |
| 1939 | 130.7 | 5.3 | 4.7 | 0.7 | 10.7 |
| 1940 | 132.1 | 5.7 | 4.6 | 0.7 | 11.0 |
| 1941 | 132.1 | 6.3 | 4.2 | 0.7 | 11.2 |
| 1942 | 131.4 | 5.2 | 2.9 | 0.6 | 8.7 |
| 1943 | 128.0 | 5.5 | 1.8 | 0.6 | 7.9 |
| 1944 | 127.2 | 5.5 | 2.6 | 0.6 | 8.7 |
| 1945 | 128.1 | 6.6 | 2.6 | 0.7 | 9.9 |
| 1946 | 138.9 | 5.9 | 4.2 | 0.7 | 10.8 |
| 1947 | 143.1 | 5.8 | 3.8 | 0.7 | 10.3 |
| 1948 | 145.7 | 6.0 | 4.4 | 0.7 | 11.1 |
| 1949 | 148.2 | 5.8 | 4.5 | 0.6 | 10.9 |
| 1950 | 150.8 | 6.3 | 4.9 | 0.6 | 11.8 |
| 1951 | 151.6 | 6.3 | 4.3 | 0.6 | 11.2 |
| 1952 | 153.9 | 6.2 | 4.3 | 0.7 | 11.2 |
| 1953 | 156.6 | 6.4 | 4.3 | 0.7 | 11.4 |
| 1954 | 159.7 | 6.2 | 4.3 | 0.7 | 11.2 |
| 1955 | 163.0 | 5.9 | 3.9 | 0.7 | 10.5 |
| 1956 | 166.1 | 5.7 | 4.0 | 0.7 | 10.4 |
| 1957 | 169.1 | 5.5 | 4.0 | 0.7 | 10.2 |
| 1958 | 172.2 | 5.7 | 4.3 | 0.6 | 10.6 |
| 1959 | 175.3 | 5.9 | 4.4 | 0.6 | 10.9 |

See notes at end of table.

(Continued)

## U.S. CONSUMPTION

### U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-89 (1)

| Year | Civilian resident population July 1 (2) | Per capita consumption | | | |
|---|---|---|---|---|---|
| | | Fresh and frozen (3) | Canned (4) | Cured (5) | Total |
| | Million persons | Pounds, edible meat | | | |
| 1960 | 178.1 | 5.7 | 4.0 | 0.6 | 10.3 |
| 1961 | 181.1 | 5.9 | 4.3 | 0.5 | 10.7 |
| 1962 | 183.7 | 5.8 | 4.3 | 0.5 | 10.6 |
| 1963 | 186.5 | 5.8 | 4.4 | 0.5 | 10.7 |
| 1964 | 189.1 | 5.9 | 4.1 | 0.5 | 10.5 |
| 1965 | 191.6 | 6.0 | 4.3 | 0.5 | 10.8 |
| 1966 | 193.4 | 6.1 | 4.3 | 0.5 | 10.9 |
| 1967 | 195.3 | 5.8 | 4.3 | 0.5 | 10.6 |
| 1968 | 197.1 | 6.2 | 4.3 | 0.5 | 11.0 |
| 1969 | 199.1 | 6.6 | 4.2 | 0.4 | 11.2 |
| 1970 | 201.9 | 6.9 | 4.5 | 0.4 | 11.8 |
| 1971 | 204.9 | 6.7 | 4.3 | 0.5 | 11.5 |
| 1972 | 207.5 | 7.1 | 4.9 | 0.5 | 12.5 |
| 1973 | 209.6 | 7.4 | 5.0 | 0.4 | 12.8 |
| 1974 | 211.6 | 6.9 | 4.7 | 0.5 | 12.1 |
| 1975 | 213.8 | 7.5 | 4.3 | 0.4 | 12.2 |
| 1976 | 215.9 | 8.2 | 4.2 | 0.5 | 12.9 |
| 1977 | 218.1 | 7.7 | 4.6 | 0.4 | 12.7 |
| 1978 | 220.5 | 8.1 | 5.0 | 0.3 | 13.4 |
| 1979 | 223.0 | 7.8 | 4.8 | 0.4 | 13.0 |
| 1980 | 225.6 | 8.0 | 4.5 | 0.3 | 12.8 |
| 1981 | 227.7 | 7.8 | 4.8 | 0.3 | 12.9 |
| 1982 | 229.9 | 7.7 | 4.3 | 0.3 | 12.3 |
| 1983 | 232.0 | 8.0 | 4.8 | 0.3 | 13.1 |
| 1984 | 234.8 | 8.5 | 4.9 | 0.3 | 13.7 |
| 1985 | 237.0 | 9.0 | 5.1 | 0.3 | 14.4 |
| 1986 | 239.4 | 9.0 | 5.4 | 0.3 | 14.7 |
| 1987 (7) | 241.7 | 10.3 | 5.1 | 0.3 | 15.7 |
| 1988 (7) | 244.1 | 10.2 | 4.7 | 0.3 | 15.2 |
| 1989 | 246.6 | *10.5 | 5.1 | 0.3 | *15.9 |

(1) The 1989 per capita consumption should not be directly compared to per capita consumption in the years 1986-88 because calculation methodology was modified in 1989 to reflect surimi production. Surimi was domestically produced during the past three years, but data were unavailable for use in per capita consumption calculation. For 1989 there is an estimate available for surimi production.

(2) Resident population for 1909 to 1929 and civilian resident population for 1930 to date.

(3) Fresh and frozen fish consumption from 1910 to 1928 is estimated. Beginning in 1973, data include consumption of artificially cultivated catfish. Domestic landings used in calculating consumption are preliminary after 1977.

(4) Canned fish consumption for 1911 to 1920 is estimated. Beginning in 1921, it is based on production reports, packer stocks, and foreign trade statistics for individual years.

(5) Cured fish consumption for 1910 to 1928 is estimated.

(6) Data for 1909 estimate based on the 1908 census and foreign trade data.

(7) Revised.

*Record.

# PER CAPITA

## U.S. CONSUMPTION

### U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, 1969-89

| Year | Salmon | Sardines | Tuna | Shellfish | Other | Total |
|---|---|---|---|---|---|---|
| | Pounds | | | | | |
| 1969 | 0.7 | 0.4 | 2.4 | 0.5 | 0.2 | 4.2 |
| 1970 | 0.7 | 0.4 | 2.5 | 0.5 | 0.4 | 4.5 |
| 1971 | 0.7 | 0.4 | 2.4 | 0.5 | 0.3 | 4.3 |
| 1972 | 0.7 | 0.4 | 2.9 | 0.5 | 0.4 | 4.9 |
| 1973 | 0.4 | 0.5 | 3.1 | 0.5 | 0.5 | 5.0 |
| 1974 | 0.3 | 0.4 | 3.1 | 0.5 | 0.4 | 4.7 |
| 1975 | 0.3 | 0.2 | 2.9 | 0.5 | 0.4 | 4.3 |
| 1976 | 0.3 | 0.3 | 2.8 | 0.4 | 0.4 | 4.2 |
| 1977 | 0.5 | 0.3 | 2.8 | 0.6 | 0.4 | 4.6 |
| 1978 | 0.6 | 0.3 | 3.3 | 0.5 | 0.3 | 5.0 |
| 1979 | 0.5 | 0.3 | 3.2 | 0.5 | 0.3 | 4.8 |
| 1980 | 0.5 | 0.3 | 2.9 | 0.5 | 0.3 | 4.5 |
| 1981 | 0.5 | 0.4 | 3.1 | 0.5 | 0.3 | 4.8 |
| 1982 | 0.5 | 0.3 | 2.7 | 0.4 | 0.4 | 4.3 |
| 1983 | 0.5 | 0.2 | 3.1 | 0.6 | 0.4 | 4.8 |
| 1984 | 0.6 | 0.2 | 3.2 | 0.4 | 0.5 | 4.9 |
| 1985 | 0.5 | 0.3 | 3.3 | 0.5 | 0.5 | 5.1 |
| 1986 (1) | 0.5 | 0.3 | 3.6 | 0.5 | 0.5 | 5.4 |
| 1987 (1) | 0.4 | 0.3 | 3.5 | 0.5 | 0.4 | 5.1 |
| 1988 (1) | 0.3 | 0.3 | 3.6 | 0.4 | 0.1 | 4.7 |
| 1989 | 0.3 | 0.3 | 3.9 | 0.4 | 0.2 | 5.1 |

(1) Revised.

NOTE:--From 1970 through 1980, data were revised to reflect the results of the 1980 census. Domestic landings data used in calculating these data are preliminary after 1977.

### U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1969-89

| Year | Fillets and steaks (1) | Sticks and portions | Shrimp all preparation |
|---|---|---|---|
| | Pounds (2) | | |
| 1969 | 2.0 | 1.6 | 1.3 |
| 1970 | 2.2 | 1.7 | 1.5 |
| 1971 | 2.0 | 1.6 | 1.4 |
| 1972 | 2.3 | 1.8 | 1.4 |
| 1973 | 2.5 | 2.0 | 1.4 |
| 1974 | 2.1 | 1.8 | 1.5 |
| 1975 | 2.4 | 1.8 | 1.4 |
| 1976 | 2.5 | 2.0 | 1.5 |
| 1977 | 2.5 | 2.0 | 1.6 |
| 1978 | 2.7 | 2.2 | 1.5 |
| 1979 | 2.7 | *2.2 | 1.3 |
| 1980 | 2.6 | 1.9 | 1.4 |
| 1981 | 2.7 | 1.8 | 1.5 |
| 1982 | 2.7 | 1.7 | 1.5 |
| 1983 | 2.9 | 1.8 | 1.7 |
| 1984 | 3.0 | 1.8 | 1.9 |
| 1985 | 3.2 | 1.8 | 2.0 |
| 1986 (3) | 3.3 | 1.8 | 2.2 |
| 1987 (3) | *3.5 | 1.7 | 2.4 |
| 1988 (3) | 3.0 | 1.5 | 2.4 |
| 1989 | 3.0 | 1.3 | 2.3 |

(1) Data include groundfish and other species. Data do not include blocks, but fillets could be made into blocks from which sticks and portions could be produced.
(2) Product weight of fillets and steaks and sticks and portions, edible (meat) weight of shrimp.
(3) Revised.
*Record.

Note:--From 1970 through 1980, data were revised to reflect the results of the 1980 census. Domestic landings data used in calculating these data are preliminary after 1977.

# PER CAPITA

## U.S. USE

Per capita use of commercial fish and shellfish is based on the supply of fishery products, both edible and nonedible (industrial), on a round weight equivalent basis, without considering beginning or ending stocks, defense purchases, or exports (see page 61).

Per capita use figures are not comparable with per capita consumption data (see page 72). Per capita consumption figures represent edible (for human use) meat weight consumption rather than round weight consumption. In addition, per capita consumption includes allowances for beginning and ending stocks and exports, whereas the use does not include such allowances.

Per capita use is derived by using total population including U.S. Armed Forces overseas. The per capita consumption is derived by using civilian resident population.

### U.S ANNUAL PER CAPITA USE OF COMMERCIAL FISH AND SHELLFISH, 1954-89 (1)

| Year | Total population including armed forces overseas July 1 | Total U.S. supply | Per capita utilization | | |
|---|---|---|---|---|---|
| | | | Commercial landings | Imports | Total |
| | Million persons | Million pounds | Pounds | | |
| 1954 | 163.0 | 7,593 | 29.2 | 17.4 | 46.6 |
| 1955 | 165.9 | 7,121 | 29.0 | 13.9 | 42.9 |
| 1956 | 168.9 | 7,569 | 31.2 | 13.6 | 44.8 |
| 1957 | 172.0 | 7,164 | 27.9 | 13.8 | 41.7 |
| 1958 | 174.9 | 7,526 | 27.1 | 15.9 | 43.0 |
| 1959 | 177.8 | 8,460 | 28.8 | 18.8 | 47.6 |
| 1960 | 180.7 | 8,223 | 27.3 | 18.2 | 45.5 |
| 1961 | 183.7 | 9,570 | 28.2 | 23.9 | 52.1 |
| 1962 | 186.5 | 10,408 | 28.7 | 27.1 | 55.8 |
| 1963 | 189.2 | 11,434 | 25.6 | 34.8 | 60.4 |
| 1964 | 191.9 | 12,031 | 23.7 | 39.0 | 62.7 |
| 1965 | 194.3 | 10,535 | 24.6 | 29.6 | 54.2 |
| 1966 | 196.6 | 12,469 | 22.2 | 41.2 | 63.4 |
| 1967 | 198.7 | 13,991 | 20.4 | 50.0 | 70.4 |
| 1968 | 200.7 | 17,381 | 20.7 | 65.9 | 86.6 |
| 1969 | 202.7 | 11,847 | 21.4 | 37.0 | 58.4 |
| 1970 | 205.1 | 11,474 | 24.0 | 31.9 | 55.9 |
| 1971 | 207.7 | 11,804 | 24.1 | 32.7 | 56.8 |
| 1972 | 209.9 | 13,849 | 22.9 | 43.1 | 66.0 |
| 1973 | 211.9 | 10,378 | 22.9 | 26.1 | 49.0 |
| 1974 | 213.9 | 9,875 | 23.2 | 23.0 | 46.2 |
| 1975 | 216.0 | 10,164 | 22.6 | 24.5 | 47.1 |
| 1976 | 218.0 | 11,593 | 24.7 | 28.5 | 53.2 |
| 1977 | 220.2 | 10,652 | 23.9 | 24.4 | 48.3 |
| 1978 | 222.6 | 11,509 | 27.1 | 24.6 | 51.7 |
| 1979 | 225.1 | 11,831 | 27.9 | 24.7 | 52.6 |
| 1980 | 227.7 | 11,357 | 28.5 | 21.4 | 49.9 |
| 1981 | 229.8 | 11,353 | 26.0 | 23.4 | 49.4 |
| 1982 | 232.1 | 12,011 | 27.5 | 24.3 | 51.8 |
| 1983 | 234.2 | 12,352 | 27.5 | 25.2 | 52.7 |
| 1984 | 237.0 | 12,552 | 27.2 | 25.8 | 53.0 |
| 1985 | 239.3 | 15,061 | 26.2 | 36.8 | 63.0 |
| 1986 | 241.6 | 14,368 | 25.0 | 34.5 | 59.5 |
| 1987 | 243.9 | 15,744 | 28.3 | 36.3 | 64.6 |
| 1988 | 246.3 | 14,628 | 29.2 | 30.2 | 59.4 |
| 1989 | 248.8 | 15,485 | 34.0 | 28.2 | 62.2 |

(1) Data include U.S. commercial landings and imports of both edible and nonedible (industrial) fishery products on a round weight basis. "Total supply" is not adjusted for beginning and ending stocks, defense purchases, or exports.

Note:--From 1970 through 1980, population and per capita utilization data were revised to reflect the results of the 1980 census. Domestic landings data used in calculating these data are preliminary after 1977.

# PER CAPITA

## WORLD CONSUMPTION

### ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1984-86 AVERAGE

| Region and country | Estimated live weight equivalent | |
|---|---|---|
| | Kilograms | Pounds |
| North America: | | |
| Canada | 22.4 | 49.4 |
| United States | 18.5 | 40.8 |
| Caribbean: | | |
| Antigua | 28.1 | 61.9 |
| Bahamas | 16.3 | 35.9 |
| Barbados | 29.8 | 65.7 |
| British Virgin Islands | 24.5 | 54.0 |
| Cayman Islands | 28.8 | 63.5 |
| Cuba | 20.9 | 46.1 |
| Dominica | 16.9 | 37.3 |
| Dominican Republic | 6.9 | 15.2 |
| Grenada | 24.9 | 54.9 |
| Guadeloupe | 49.5 | 109.1 |
| Haiti | 4.4 | 9.7 |
| Jamaica | 16.6 | 36.6 |
| Martinique | 47.7 | 105.2 |
| Montserrat | 9.3 | 20.5 |
| Netherland Antilles | 19.3 | 42.5 |
| St. Christopher-Nevis | 26.9 | 59.3 |
| Saint Lucia | 18.2 | 40.1 |
| St. Vincent | 12.0 | 26.5 |
| Trinidad-Tobago | 14.6 | 32.2 |
| Latin America: | | |
| Argentina | 6.6 | 14.6 |
| Belize | 6.0 | 13.2 |
| Bolivia | 1.4 | 3.1 |
| Brazil | 5.9 | 13.0 |
| Chile | 19.5 | 43.0 |
| Colombia | 3.4 | 7.5 |
| Costa Rica | 5.0 | 11.0 |
| Ecuador | 13.5 | 29.8 |
| El Salvador | 2.1 | 4.6 |
| French Guiana | 32.3 | 71.2 |
| Guatemala | 0.3 | 0.7 |
| Guyana | 38.0 | 83.8 |
| Honduras | 1.8 | 4.0 |
| Mexico | 10.0 | 22.0 |
| Nicaragua | 0.7 | 1.5 |
| Panama | 14.8 | 32.6 |
| Paraguay | 2.3 | 5.1 |
| Peru | 17.6 | 38.8 |
| Suriname | 13.3 | 29.3 |
| Uruguay | 8.4 | 18.5 |
| Venezuela | 11.5 | 25.4 |
| Europe: | | |
| Albania | 4.5 | 9.9 |
| Austria | 6.7 | 14.8 |
| Belgium and Luxembourg | 18.1 | 39.9 |
| Bulgaria | 8.9 | 19.6 |
| Czechoslovakia | 5.7 | 12.6 |
| Denmark | 21.0 | 46.3 |
| Fed. Rep. of Germany | 10.4 | 22.9 |
| Finland | 35.2 | 77.6 |
| France | 25.8 | 56.9 |
| German Democratic Rep. | 13.4 | 29.5 |
| Greece | 18.4 | 40.6 |
| Hungary | 4.5 | 9.9 |
| Iceland | 88.4 | 194.9 |
| Ireland | 15.1 | 33.3 |
| Italy | 17.9 | 39.5 |
| Malta | 14.0 | 30.9 |
| Netherlands | 8.5 | 18.7 |
| Norway | 41.2 | 90.8 |
| Poland | 18.7 | 41.2 |
| Portugal | 43.0 | 94.8 |
| Romania | 8.5 | 18.7 |
| Spain | 33.6 | 74.1 |
| Sweden | 27.8 | 61.3 |
| Switzerland | 12.9 | 28.4 |
| United Kingdom | 18.8 | 41.4 |
| Yugoslavia | 3.9 | 8.6 |
| USSR | 28.4 | 62.6 |
| Near East: | | |
| Afghanistan | 0.1 | 0.2 |
| Bahrain | 22.9 | 50.5 |
| Cyprus | 11.4 | 25.1 |
| Egypt | 5.6 | 12.3 |
| Iran | 2.9 | 6.4 |
| Iraq | 1.3 | 2.9 |
| Israel | 15.9 | 35.1 |
| Jordan | 3.2 | 7.1 |
| Kuwait | 8.5 | 18.7 |
| Lebanon | 0.6 | 1.3 |
| Libya | 4.3 | 9.5 |
| Oman | 35.1 | 77.4 |
| Qatar | 10.4 | 22.9 |
| Saudi Arabia | 9.3 | 20.5 |
| Sudan | 1.3 | 2.9 |
| Syria | 1.5 | 3.3 |
| Turkey | 6.7 | 14.8 |
| United Arab Emirates | 23.5 | 51.8 |
| Yemen Arab Republic | 3.6 | 7.9 |
| Yemen (Aden) | 27.4 | 60.4 |
| Far East: | | |
| Bangladesh | 7.4 | 16.3 |
| Brunei | 41.3 | 91.0 |
| Burma | 16.1 | 35.5 |
| Cambodia | 9.3 | 20.5 |
| China | 6.2 | 13.7 |
| Hong Kong | 45.4 | 100.1 |
| India | 3.3 | 7.3 |
| Indonesia | 13.6 | 30.0 |
| Japan | 69.3 | 152.8 |
| Laos | 4.9 | 10.8 |
| Macao | 30.2 | 66.6 |
| Maldives | 44.3 | 97.7 |
| Malaysia | 36.4 | 80.2 |
| Mongolia | 1.2 | 2.6 |
| Nepal | 0.5 | 1.1 |
| North Korea | 41.3 | 91.0 |
| Pakistan | 1.9 | 4.2 |
| Philippines | 34.1 | 75.2 |
| Republic of Korea | 47.0 | 103.6 |
| Singapore | 36.0 | 79.4 |
| Sri Lanka | 14.4 | 31.7 |
| Thailand | 21.7 | 47.8 |
| Vietnam | 12.6 | 27.8 |

See footnote at end of table.

(Continued)

# PER CAPITA

## WORLD CONSUMPTION

### ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1984-86 AVERAGE - Continued

| Region and country | Estimated live weight equivalent | |
|---|---|---|
| | Kilograms | Pounds |
| Africa: | | |
| Algeria | 3.5 | 7.7 |
| Angola | 13.3 | 29.3 |
| Benin | 6.9 | 15.2 |
| Botswana | 2.7 | 6.0 |
| Burkina | 2.1 | 4.6 |
| Burundi | 2.2 | 4.9 |
| Cameroon | 16.2 | 35.7 |
| Cape Verde | 26.3 | 58.0 |
| Central African Republic | 5.2 | 11.5 |
| Chad | 17.1 | 37.7 |
| Comoros | 12.0 | 26.5 |
| Congo (Brazaville) | 41.3 | 91.0 |
| Equatorial Guinea | 14.9 | 32.8 |
| Ethiopia | 0.1 | 0.2 |
| Gabon | 25.5 | 56.2 |
| Gambia | 18.0 | 39.7 |
| Ghana | 21.4 | 47.2 |
| Guinea | 6.2 | 13.7 |
| Guinea-Bissau | 2.3 | 5.1 |
| Ivory Coast | 16.7 | 36.8 |
| Kenya | 4.8 | 10.6 |
| Lesotho | 2.1 | 4.6 |
| Liberia | 15.4 | 34.0 |
| Madagascar | 5.6 | 12.3 |
| Malawi | 9.6 | 21.2 |
| Mali | 7.2 | 15.9 |
| Mauritania | 14.4 | 31.7 |
| Mauritius | 14.5 | 32.0 |
| Morocco | 6.8 | 15.0 |
| Mozambique | 3.0 | 6.6 |
| Namibia | 26.6 | 58.6 |
| Niger | 0.5 | 1.1 |
| Nigeria | 6.4 | 14.1 |
| Republic of South Africa | 8.7 | 19.2 |
| Reunion | 24.7 | 54.5 |
| Rwanda | 0.2 | 0.4 |
| Sao Tome | 37.3 | 82.2 |
| Senegal | 24.9 | 54.9 |
| Seychelles | 44.3 | 97.7 |
| Sierra Leone | 16.8 | 37.0 |
| Somalia | 3.6 | 7.9 |
| Swaziland | 0.1 | 0.2 |
| Tanzania | 14.3 | 31.5 |
| Togo | 11.7 | 25.8 |
| Tunisia | 10.4 | 22.9 |
| Uganda | 13.7 | 30.2 |
| Zaire | 10.1 | 22.3 |
| Zambia | 10.3 | 22.7 |
| Zimbabwe | 2.0 | 4.4 |
| Oceania: | | |
| Australia | 16.3 | 35.9 |
| Fiji | 43.4 | 95.7 |
| French Polynesia | 31.2 | 68.8 |
| New Caledonia | 19.3 | 42.5 |
| New Zealand | 12.8 | 28.2 |
| Paupa New Guinea | 18.2 | 40.1 |
| Tonga | 21.1 | 46.5 |
| Vanuatu | 27.0 | 59.5 |
| Western Samoa | 42.9 | 94.6 |
| *World* | *12.4* | *27.3* |

Note:--Data for most countries are tentative. Aquatic plants are included where applicable.

Source:--Food and Agriculture Organization of the United Nations (FAO) Yearbook of Fishery Statistics, 1988, vol. 67, Rome.

# PRICES

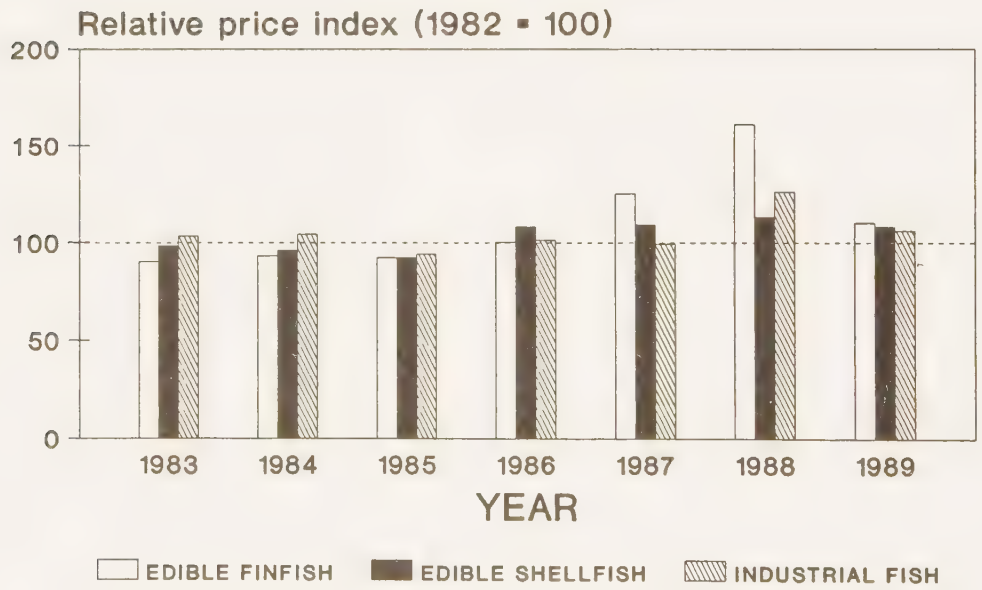
In 1989 the base year for computing the exvessel price index has been changed to 1982 to conform with current government standards. Indexes have been recalculated for 1983-89.

In the table that follows, the exvessel price for any given year was obtained by dividing total value by total quantity by species as reported in the distance from shore tables on pages 6-9. The index for each species or group was obtained by multiplying the current annual price by the total quantity caught in 1982 (the base year). That number was then divided by the 1982 value to obtain the final index:

$$\frac{\text{100 x Current price X 1982 quantity)}}{\text{1982 Annual Value}} = \text{Index}$$

Each index number calculated for years (other than the base year of 1982) measures price changes from the 1982 reference period when the index equaled 100. A species of fish that sold for $0.75 a pound in 1986 and a $1.00 a pound in 1982 would have an index of 75 in 1986. In 1989, if the price of the same species increased to $1.05, the index in 1989 would be 105.

## INDEXES OF EXVESSEL PRICES
## 1983 - 1989



## INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY YEARS, 1983-89
(1982=100)

| Species | 1983 (1) | 1984 (1) | 1985 (1) | 1986 (1) | 1987 (1) | 1988 (1) | 1989 |
|---|---|---|---|---|---|---|---|
| GROUNDFISH ET AL: | | | | | | | |
| COD | 81 | 77 | 75 | 69 | 88 | 73 | 73 |
| HADDOCK | 117 | 142 | 189 | 200 | 257 | 220 | 239 |
| POLLOCK: | | | | | | | |
| ATLANTIC | 78 | 73 | 72 | 115 | 175 | 150 | 191 |
| ALASKA | 74 | 77 | 79 | 85 | 110 | 121 | 134 |
| FLOUNDERS | 98 | 105 | 70 | 64 | 70 | 55 | 66 |
| *TOTAL GROUNDFISH, ET AL.* | *33* | *98* | *85* | *83* | *101* | *86* | 96 |
| HALIBUT | 105 | 62 | 73 | 124 | 135 | 104 | 132 |
| SEA HERRING | 139 | 83 | 144 | 133 | 144 | 162 | 75 |
| SALMON: | | | | | | | |
| CHINOOK | 70 | 95 | 87 | 90 | 110 | 141 | 85 |
| CHUM | 97 | 89 | 87 | 89 | 113 | 206 | 98 |
| PINK | 110 | 111 | 104 | 91 | 147 | 319 | 159 |
| SOCKEYE | 78 | 94 | 114 | 161 | 177 | 258 | 142 |
| COHO | 67 | 91 | 89 | 80 | 145 | 198 | 77 |
| *TOTAL SALMON* | *81* | *95* | *102* | *121* | *151* | *232* | 120 |
| SWORDFISH | 97 | 105 | 99 | 115 | 130 | 121 | 119 |
| TUNA: | | | | | | | |
| ALBACORE | 89 | 90 | 78 | 78 | 111 | 124 | 126 |
| BLUEFIN | 254 | 295 | 160 | 81 | 483 | 587 | 612 |
| SKIPJACK | 84 | 80 | 67 | 68 | 80 | 103 | 86 |
| YELLOWFIN | 92 | 89 | 76 | 72 | 92 | 114 | 101 |
| *TOTAL TUNA* | *92* | *90* | *74* | *71* | *97* | *121* | 108 |
| *TOTAL EDIBLE FINFISH* | *90* | *93* | *92* | *100* | *125* | *161* | 110 |
| CLAMS: | | | | | | | |
| HARD | 89 | 101 | 92 | 119 | 130 | 164 | 145 |
| OCEAN QUAHOG | 96 | 98 | 98 | 111 | 106 | 103 | 103 |
| SOFT | 114 | 137 | 150 | 171 | 145 | 150 | 159 |
| SURF | 85 | 94 | 103 | 104 | 88 | 88 | 88 |
| *TOTAL CLAMS* | *93* | *104* | *105* | *122* | *118* | *134* | 127 |
| CRABS: | | | | | | | |
| BLUE | 114 | 110 | 111 | 124 | 142 | 153 | 158 |
| DUNGENESS | 135 | 159 | 147 | 138 | 138 | 122 | 118 |
| KING | 89 | 79 | 88 | 114 | 114 | 135 | 135 |
| SNOW | 83 | 67 | 57 | 72 | 82 | 89 | 92 |
| *TOTAL CRABS* | *97* | *91* | *91* | *107* | *113* | *124* | 126 |
| AMERICAN LOBSTER | 105 | 113 | 108 | 114 | 127 | 130 | 122 |
| OYSTERS | 95 | 119 | 113 | 137 | 165 | 175 | 198 |
| SCALLOPS: | | | | | | | |
| BAY | 141 | 127 | 115 | 229 | 140 | 155 | 158 |
| CALICO | 122 | 54 | 97 | 186 | 106 | 102 | 88 |
| SEA | 149 | 145 | 129 | 133 | 113 | 115 | 107 |
| *TOTAL SCALLOPS* | *145* | *133* | *124* | *146* | *114* | *116* | 109 |
| SHRIMP: | | | | | | | |
| GULF AND SOUTH ATLANTIC | 105 | 84 | 77 | 92 | 89 | 90 | 79 |
| OTHER | 140 | 107 | 95 | 113 | 155 | 102 | 92 |
| *TOTAL SHRIMP* | *106* | *85* | *77* | *93* | *92* | *91* | 80 |
| *TOTAL EDIBLE SHELLFISH* | *98* | *96* | *92* | *108* | *109* | *113* | 108 |
| *TOTAL EDIBLE FISH AND SHELLFISH* | *94* | *95* | *92* | *104* | *116* | *135* | 109 |
| INDUSTRIAL FISH, MENHADEN | 103 | 104 | 94 | 101 | 99 | 126 | 106 |
| **ALL FISH AND SHELLFISH** | 95 | 96 | 92 | 104 | 115 | 134 | 109 |

(1) Revised.

## SUMMARY OF 1989 VALUE ADDED, MARGINS, AND CONSUMER EXPENDITURES FOR COMMERCIAL MARINE FISHERY PRODUCTS IN THE UNITED STATES (1)

| Sector or type of activity | Purchase of fishery inputs | Mark-up of fishery inputs | Total mark-up within sector | Value added as percent of total mark-up | Value added within sector | Value of sales by sector | Value added contribution | Offshore fleet & exported fishery products |
|---|---|---|---|---|---|---|---|---|
| | Thousand Dollars | Percentage of Fishery Inputs | Thousand Dollars | Percentage | Thousand Dollars | Thousand Dollars | Percentage of GNP Contribution | Thousand Dollars |
| Domestic Harvest: | | | | | | | | |
| Edible..... | - | 100.0 | 3,153,978 | 63.28 | 1,995,769 | 3,153,978 | 11.6 | - |
| Industrial..... | - | 100.0 | 84,462 | 60.43 | 51,039 | 84,462 | 0.3 | - |
| Harvest not landed in U.S... | - | 100.0 | 326,704 | 57.76 | 188,699 | 326,704 | 1.1 | 326,704 |
| Imports, Unprocessed.. | 2,156,462 | - | - | - | - | 2,156,462 | - | - |
| Exports, Unprocessed.. | - | - | - | - | - | - | - | 1,125,442 |
| Primary Wholesale and Processing..... | 4,269,460 | 114.4 | 4,884,133 | 57.4 | 2,805,258 | 9,153,593 | 16.3 | - |
| Imports, Processed.... | 3,383,038 | - | - | - | - | 3,383,038 | - | - |
| Exports, Processed.... | - | - | - | - | - | - | - | 1,201,566 |
| Secondary Wholesale and Processing: | | | | | | | | |
| Edible..... | 11,187,078 | 22.8 | 2,549,235 | 54.9 | 1,399,539 | 13,736,313 | 8.1 | - |
| Industrial..... | 147,987 | 22.8 | 33,722 | 54.9 | 18,514 | 181,709 | 0.1 | - |
| Retail Trade from Food Service..... | 6,882,989 | 177.8 | 12,239,596 | 73.4 | 8,978,115 | 19,122,584 | 52.2 | - |
| Retail Trade from Stores..... | 6,853,324 | 31.9 | 2,186,808 | 80.5 | 1,759,700 | 9,040,132 | 10.2 | - |
| TOTAL U.S. VALUE ADDED ACTIVITY: | | | | | $17,196,633 | | 100.0 | |
| *CONSUMERS EXPENDITURES (& WHOLESALE PURCHASES OF INDUSTRIAL PRODUCTS) FOR FISHERY PRODUCTS:* | | | | | | *$28,344,426* | | |

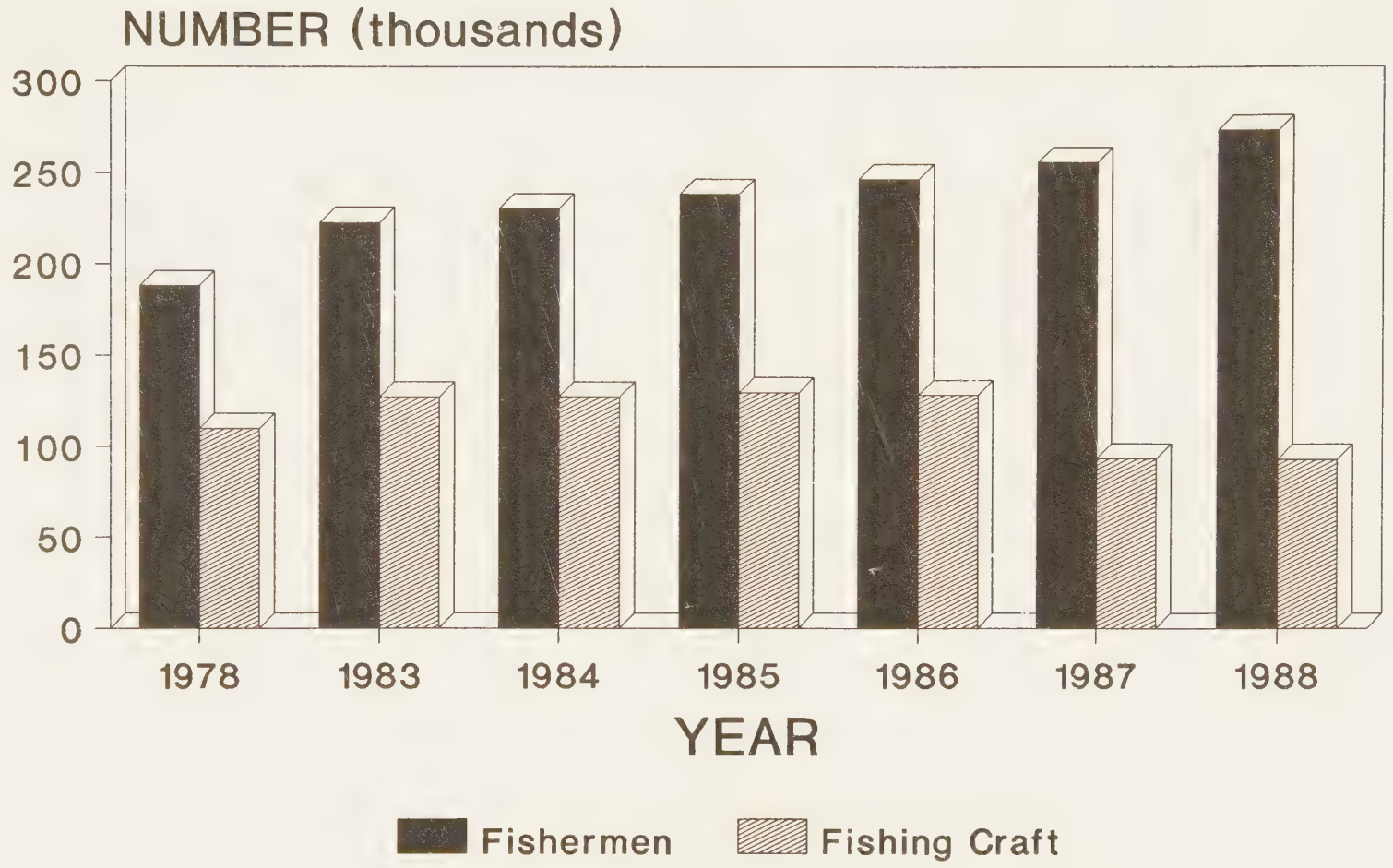
(1) Includes industrial products, landings by U.S.-flag vessels at U.S. and foreign ports, and joint ventures.

Note.-- The table reports the contribution of commercial marine fishing to the national economy as measured by margin, value added, and sales. These measures are consistent with the Bureau of the Census definitions.

Margin or mark-up is the difference between the price paid for the product by the consumer or wholesale purchaser and the dockside or wholesale value for an equivalent weight of the product. (It is assumed that fishermen catch their fish without paying purchase price and therefore the entire dockside or exvessel price is considered margin.) Value added is a measure of the factors added to the total worth of a product at each stage of the production process. It is defined as the gross receipts of firms minus the cost of purchased goods and services needed to fabricate the product. Gross National Products (GNP) is equal to the sum of the value added of all economic entities in the economy. Value added within a sector represents that sector's contribution to GNP.

Value added includes wages, salaries, interest, depreciation, rent, taxes and profit. Consumer expenditures are the final retail value of seafood products sold through stores and food service outlets plus secondary wholesale and processing of industrial products.

# NUMBER OF FISHERMEN AND FISHING CRAFT
# 1978 - 1988



# EMPLOYMENT, CRAFT, AND PLANTS

## FISHERY EMPLOYMENT, CRAFT, AND ESTABLISHMENTS, VARIOUS YEARS, 1970-88 (1)

| Item | 1970 | 1972 | 1974 | 1976 | 1978 | 1988 |
|---|---|---|---|---|---|---|
| | Number | | | | | |
| Persons employed: | | | | | | |
| Fishermen | 140,538 | 139,119 | 161,361 | 173,610 | 188,300 | 273,700 |
| Processing and wholesaling (2) | 86,813 | 91,268 | 92,118 | 93,609 | 99,446 | 90,005 |
| *Total* | *227,351* | *230,387* | *253,479* | *267,219* | *287,746* | *363,705* |
| Craft used: | | | | | | |
| Vessels (3) | 13,591 | 14,507 | 15,891 | 16,675 | 18,100 | 23,300 |
| Motor boats | 71,570 | 69,795 | 83,436 | 84,445 | 90,200 | 68,000 |
| Other boats | 2,000 | 1,570 | 1,907 | 1,501 | 1,600 | 1,600 |
| *Total* | *87,161* | *85,872* | *101,234* | *102,621* | *109,900* | *92,900* |
| Processors and wholesalers: | | | | | | |
| New England States | 537 | 500 | 483 | 503 | 492 | 888 |
| Mid-Atlantic States | 832 | 793 | 745 | 768 | 763 | 573 |
| South Atlantic States | 432 | 445 | 433 | 522 | 506 | 622 |
| Gulf Coast States | 817 | 796 | 742 | 726 | 840 | 1,187 |
| Pacific States | 402 | 223 | 356 | 362 | 437 | 727 |
| Alaska | 108 | 322 | 239 | 182 | 178 | 442 |
| Inland States (4) | 564 | 537 | 487 | 511 | 266 | 68 |
| Other (5) | 43 | 47 | 49 | 43 | 42 | 64 |
| *Total* | *3,735* | *3,663* | *3,534* | *3,617* | *3,524* | *4,571* |

(1) Fishermen and craft estimated for 1978 and 1988. Chesapeake Region not available for craft used in 1988.
(2) Average for season. (3) Craft 5 net tons and over as documented by U.S. Coast Guard.
(4) Data estimated for some Inland States. (5) A partial survey was conducted for other areas or States.

## PLANTS PRODUCING CANNED FISHERY PRODUCTS, INDUSTRIAL FISHERY PRODUCTS, AND FISH FILLETS AND STEAKS, 1989

| Area and State | Canned fishery products | Industrial fishery products | Fish fillets and steaks | Total plants exclusive of duplication |
|---|---|---|---|---|
| | Number | | | |
| New England: | | | | |
| Maine | 10 | 3 | 29 | 42 |
| Massachusetts | - | - | 65 | 65 |
| New Hampshire | - | - | 4 | 4 |
| Rhode Island | - | - | 18 | 18 |
| Connecticut | 1 | - | 2 | 3 |
| *Total* | *11* | *3* | *118* | *132* |
| Mid-Atlantic: | | | | |
| New York | 3 | 1 | 17 | 21 |
| New Jersey | 9 | - | 1 | 10 |
| Pennsylvania | 2 | - | 1 | 3 |
| Delaware | 2 | - | - | 2 |
| Maryland | 1 | 1 | 1 | 3 |
| Virginia | 2 | 5 | 4 | 11 |
| *Total* | *19* | *7* | *23* | *50* |
| South Atlantic and Gulf: | | | | |
| North Carolina | 1 | 4 | 19 | 24 |
| South Carolina | 1 | - | 9 | 10 |
| Georgia | - | 2 | 4 | 5 |
| Florida | 1 | 2 | 56 | 59 |
| Alabama | - | 2 | 3 | 5 |
| Mississippi | 2 | 2 | 1 | 5 |
| Louisiana | 5 | 19 | 20 | 44 |
| *Total* | *10* | *31* | *112* | *152* |
| Pacific: | | | | |
| Alaska | 51 | 8 | 34 | 85 |
| Washington | 20 | 3 | 25 | 44 |
| Oregon | 4 | - | 15 | 18 |
| California | 6 | 5 | 27 | 38 |
| *Total* | *81* | *16* | *101* | *185* |
| Hawaii | - | - | 9 | 9 |
| Inland States | 1 | 1 | 20 | 21 |
| American Samoa | 2 | 2 | - | 2 |
| Puerto Rico | 5 | 4 | - | 5 |
| *Grand total* | *129* | *64* | *383* | *549* |

## PROCESSORS AND WHOLESALERS: PLANTS AND EMPLOYMENT, 1988

| State and area | Processing | | | Wholesale | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Plants | Employment average | | Plants | Employment average | | Plants | Employment average | |
| | | Season | Year | | Season | Year | | Season | Year |
| | Number | | | | | | | | |
| **New England:** | | | | | | | | | |
| Maine | 106 | 2,107 | 2,045 | 258 | 721 | 681 | 364 | 2,828 | 2,726 |
| New Hampshire | 11 | 477 | 477 | 7 | 41 | 41 | 18 | 518 | 518 |
| Massachusetts | 112 | 3,605 | 3,598 | 236 | 1,223 | 1,196 | 348 | 4,828 | 4,794 |
| Rhode Island | 29 | 438 | 438 | 79 | 336 | 312 | 108 | 774 | 750 |
| Connecticut | 3 | 25 | 24 | 47 | 243 | 240 | 50 | 268 | 264 |
| *Total* | *261* | *6,652* | *6,582* | *627* | *2,564* | *2,470* | *888* | *9,216* | *9,052* |
| **Mid-Atlantic:** | | | | | | | | | |
| New York | 32 | 386 | 385 | 158 | 1,227 | 1,221 | 190 | 1,613 | 1,606 |
| New Jersey | 23 | 837 | 814 | 59 | 337 | 334 | 82 | 1,174 | 1,148 |
| Pennsylvania | 10 | 945 | 938 | 13 | 208 | 207 | 23 | 1,153 | 1,145 |
| Delaware | 3 | 532 | 530 | 8 | 25 | 24 | 11 | 557 | 554 |
| District of Columbia | - | - | - | 5 | 81 | 81 | 5 | 81 | 81 |
| Maryland | 62 | 2,580 | 2,437 | 65 | 543 | 504 | 127 | 3,123 | 2,941 |
| Virginia | 80 | 2,741 | 2,635 | 55 | 411 | 389 | 135 | 3,152 | 3,024 |
| *Total* | *210* | *8,021* | *7,739* | *363* | *2,832* | *2,760* | *573* | *10,853* | *10,499* |
| **South Atlantic:** | | | | | | | | | |
| North Carolina | 100 | 2,032 | 1,906 | 166 | 638 | 530 | 266 | 2,670 | 2,436 |
| South Carolina | 20 | 289 | 241 | 85 | 399 | 325 | 105 | 688 | 566 |
| Georgia | 14 | 1,296 | 1,282 | 66 | 170 | 168 | 80 | 1,466 | 1,450 |
| Florida, East Coast | 37 | 1,697 | 1,650 | 134 | 539 | 535 | 171 | 2,236 | 2,185 |
| *Total* | *171* | *5,314* | *5,079* | *451* | *1,746* | *1,558* | *622* | *7,060* | *6,637* |
| **Gulf:** | | | | | | | | | |
| Florida, West Coast | 173 | 4,013 | 3,979 | 182 | 651 | 641 | 355 | 4,664 | 4,620 |
| Alabama | 71 | 1,799 | 1,699 | 25 | 110 | 103 | 96 | 1,909 | 1,802 |
| Mississippi | 40 | 1,575 | 1,588 | 31 | 143 | 137 | 71 | 1,718 | 1,725 |
| Louisiana | 183 | 4,864 | 4,011 | 314 | 1,457 | 1,307 | 497 | 6,321 | 5,318 |
| Texas | 35 | 1,468 | 1,264 | 133 | 620 | 594 | 168 | 2,088 | 1,858 |
| *Total* | *502* | *13,719* | *12,541* | *685* | *2,981* | *2,782* | *1,187* | *16,700* | *15,323* |
| **Pacific:** | | | | | | | | | |
| California | 98 | 4,661 | 4,565 | 311 | 2,267 | 2,190 | 409 | 6,928 | 6,755 |
| Oregon | 36 | 1,964 | 1,946 | 26 | 149 | 142 | 62 | 2,113 | 2,088 |
| Washington | 134 | 3,746 | 3,575 | 122 | 555 | 522 | 256 | 4,301 | 4,097 |
| *Total* | *268* | *10,371* | *10,086* | *459* | *2,971* | *2,854* | *727* | *13,342* | *12,940* |
| *Alaska (1), Total* | *442* | *31,244* | *23,000* | *(2)* | *(2)* | *(2)* | *442* | *31,244* | *23,000* |
| *Inland States (3), Total* | *39* | *460* | *430* | *29* | *120* | *113* | *68* | *580* | *543* |
| *Other Areas or States: (4), Total.* | *20* | *11,713* | *11,713* | *44* | *299* | *298* | *64* | *12,012* | *12,011* |
| *Grand Total* | *1,913* | *87,494* | *77,170* | *2,658* | *13,513* | *12,835* | *4,571* | *101,007* | *90,005* |

(1) Data for Alaska have been estimated. (2) Data not available. (3) Data covers Colorado, Idaho, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nevada, Ohio, Oklahoma, South Dakota, Utah, Wisconsin, and a partial survey conducted for other States. (4) Includes American Samoa, Guam, Hawaii, Northern Marianas, and Puerto Rico.

## FISHERY PRODUCTS AND ESTABLISHMENTS INSPECTED IN CALENDAR YEAR, 1989

| Region | Edible fishery products | | | | | | |
|---|---|---|---|---|---|---|---|
| | Establishments (1) | | Amount inspected | | | | |
| | SIFE (2) | PUFI (3) | Grade A (4) | PUFI (4) | No mark (5) | Lot (6) | Total |
| | -----Number----- | | ----------Thousand pounds---------- | | | | |
| Northeast..... | 2 | 45 | 71,857 | 159,963 | 17,790 | 79,170 | 328,780 |
| Southeast..... | 0 | 73 | 16,600 | 19,158 | 23,602 | 16,743 | 76,103 |
| West..... | 4 | 42 | 28,975 | 11,020 | 39,602 | 78,691 | 158,288 |
| *Total, 1989.....* | *6* | *160* | *117,432* | *190,141* | *80,993* | *174,604* | *563,170* |
| *Total, 1988.....* | *7* | *126* | *106,227* | *197,942* | *57,728* | *133,589* | *495,486* |

(1) These establishments are inspected under contract and certified as meeting U.S. Department of Commerce (USDC) regulations for construction and maintenance of facilities and equipment, processing techniques, and employment practices.

(2) Fish processing establishments approved for sanitation under the Sanitary Inspected Fish Establishment service (SIFE). Products are not processed under inspection.

(3) Sanitarily inspected fish establishments processing fishery products under USDC inspection.

(4) Products processed under USDC inspection in inspected establishments and labeled with USDC inspection mark as "Packed Under Federal Inspection" (PUFI) and/or "U.S. Grade A."

(5) Products processed under inspection in inspected establishments but bearing no USDC inspection mark.

(6) Lot inspected products checked for quality and condition at the time of examination and located in processing plants, warehouses, cold storage facilities, or terminal markets anywhere in the United States.

Note:--Table may not add due to rounding.

Source:--NMFS, Office of Trade and Industry Services, F/TS4.

# THE MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT

The Magnuson Fishery Conservation and Management Act (MFCMA), Public Law 94-265 as amended (Magnuson Act), provides for the conservation and management of all fishery resources within the U.S. Exclusive Economic Zone (EEZ) except highly migratory species of tuna. It also provides for fishery management authority over continental shelf resources and anadromous species beyond the EEZ, except when they are found within a foreign nation's territorial sea or fishery conservation zone (or equivalent), to the extent that such sea or zone is recognized by the United States.

The EEZ extends from the seaward boundary of each of the coastal States (generally 3 nautical miles from shore for all but two States) to 200 nautical miles from shore. The seaward boundaries of Texas, Puerto Rico, and the Gulf coast of Florida are 3 marine leagues (9 nautical miles).

## GOVERNING INTERNATIONAL FISHERY AGREEMENTS

Under the Magnuson Act, the U.S. Department of State, with cooperation from the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce, negotiates Governing International Fishery Agreements (GIFAs) with foreign countries wishing to fish within the EEZ. After a GIFA is signed, it is transmitted by the President to the Congress for review.

## FOREIGN FISHING PERMITS

Vessels of foreign nations which have GIFAs with the United States may fish in the EEZ for species managed under the Magnuson Act after receiving an allocation of that species and a valid fishing permit. After a GIFA is in force, a foreign nation must submit a permit application to the U.S. Department of State for each vessel to fish in the EEZ. Permit applications must also be made for foreign vessels to receive U.S. harvested fish in the EEZ, and to conduct any other operation in the EEZ in support of the catching, taking, or harvesting of fish. The U.S. Department of State provides copies of the applications to the Congress, the U.S. Coast Guard, the appropriate Regional Fishery Management Councils, and to the Assistant Administrator for Fisheries of the National Marine Fisheries Service (NMFS) with its recommendations. The NMFS also receives recommendations from the Regional Fishery Management Councils and the U.S. Coast Guard, as well as the general public.

The Assistant Administrator for Fisheries reviews recommendations bearing on approval of each application and, after consulting with the U.S. Department of State and the U.S. Coast Guard, may approve an application in whole or in part. Any conditions and restrictions on the approval of an application are sent to the foreign nation through the U.S. Department of State, and must be accepted by the nation before a permit is issued.

## FEES

Foreign nations engaged in fisheries subject to U.S. jurisdiction are charged permit fees, poundage fees, a foreign fee surcharge, and an observer fee. An incremental fee may also be charged, which is a percentage of the poundage fee from any country found not to be cooperating in the conservation and development of U.S. fishery resources.

The permit fees in 1989 recovered costs of issuing permits, based upon a standard administrative charge of $354 for each foreign permit application.

Poundage fees are charged for the fish harvested by foreign vessels. Poundage fees vary in relation to the exvessel values of the species harvested by a nation's vessels. Poundage fees are not currently charged for U.S. harvested fish received by foreign vessels. Collections from 1989 poundage fees were expected to continue to decrease as foreign fishing falls to very low levels.

The surcharge is to capitalize a fund to compensate U.S. fishermen operating in the EEZ whose vessels or gear are lost or damaged because of conflicts with foreign vessels. The surcharge on poundage and permit fees was waived in 1989 because the fund was fully capitalized.

The observer fee covers U.S. costs including salary, per diem, transportation, and overhead for U.S. observers on board foreign vessels. The fee is computed on the basis of actual observer trips.

No incremental fees were paid in 1989.

## FOREIGN ALLOCATIONS

The total allowable level of foreign fishing (TALFF), if any, for any fishery subject to the exclusive fishery management authority of the United States is that portion of the optimum yield (OY) of such fishery that will not be harvested by vessels of the United States.

Each assessment of OY and each assessment of the anticipated U.S. harvest is reviewed during the fishing season. Adjustments to TALFFs are

based on updated information relating to status of stocks, estimated and actual performance of domestic and foreign fleets, and other relevant factors.

## FMPs and PMPs

Under the Magnuson Act, eight Regional Fishery Management Councils are charged with preparing Fishery Management Plans (FMPs) for the fisheries needing management within their areas of authority. After the Councils develop FMPs which cover domestic and foreign fishing efforts, the FMPs are submitted to the Secretary of Commerce for approval and implementation. The Department, through NMFS agents and the U.S. Coast Guard, is responsible for enforcing the law and regulations.

The Secretary of Commerce is also empowered to prepare plans. Where no FMP exists, Preliminary Fishery Management Plans (PMPs), which only cover foreign fishing efforts, are prepared by the Secretary for each fishery for which a foreign nation requests a permit. The Secretary is also empowered to produce an FMP for any fishery that a Council has not duly produced. In this latter case, the Secretary's FMP covers domestic and foreign fishing.

As of December 31, 1989, six Preliminary Fishery Management Plans (PMPs) were in effect, many of which have been amended since first being implemented.

Atlantic Billfishes and Sharks
Foreign Trawl Fisheries of the Northwest Atlantic
Hake Fisheries of the Northwestern Atlantic
Pacific Billfishes and Oceanic Sharks
Bering Sea Herring
Bering Sea Snails

## Fishery Management Plans (FMPs)

Under section 304 of the Magnuson Act, all Council prepared FMPs must be reviewed by the Secretary of Commerce. After FMPs have been approved under section 304 of the Magnuson Act, they are implemented by federal regulations, under section 305 of the Act. During 1989, one new FMP was adopted by a Council, submitted for Secretarial review and approved. As of December 31, 1989, there are 30 fishery management plans in place. The FMPs are listed below, and those marked with an asterisk (*) were approved and implemented during 1989. Many FMPs are amended by the Council and submitted for approval under the same Secretarial review process as new FMPs. Many of the FMPs listed have been amended since initial implementation. Those marked with a double asterisk (**) were amended in 1989.

American Lobster (**)
Northeast Multispecies (**)
Atlantic Billfishes
Atlantic Mackerel, Squid, and Butterfish
Atlantic Salmon
Atlantic Sea Scallops (**)
Atlantic Surf Clams and Ocean Quahogs fisheries
Summer Flounder
Swordfish
Gulf and South Atlantic Spiny Lobster (**)
Caribbean Shallow Water Reef Fish
Gulf and South Atlantic Corals
Gulf of Mexico Reef Fish
Gulf of Mexico Shrimp (**)
Gulf of Mexico Stone Crab
Coastal Migratory Pelagics (**)
Caribbean Spiny Lobster
Snapper/Grouper (**)
Northern Anchovy
King and Tanner Crab (*)
Commercial and Recreational Salmon (**)
High Seas Salmon
Pacific Groundfish
Gulf of Alaska Groundfish (**)
Bering Sea and Aleutian Islands Groundfish (**)
Western Pacific Crustaceans
Western Pacific Precious Corals
Western Pacific Bottomfish and Seamount Groundfish
Gulf of Mexico Red Drum
Western Pacific Pelagics

During 1989, 413 regulatory actions were processed via the Federal Register to implement FMP fishery management actions and rules for foreign fishing. This number includes hearing, meeting, and correction notices.

# REGIONAL FISHERY MANAGEMENT COUNCILS

| Council | States | Telephone Number | Executive Director |
|---|---|---|---|
| NEW ENGLAND | (Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut) | 617-231-0422 | Douglas G. Marshall<br>Suntaug Office Park<br>5 Broadway (Rt. 1)<br>Saugus, MA 01906 |
| MID-ATLANTIC | (New York, New Jersey, Delaware, Pennsylvania, Maryland, and Virginia) | 302-674-2331 | John C. Bryson<br>Federal Bldg., Rm. 2115<br>300 So. New St.<br>Dover, DE 19901 |
| SOUTH ATLANTIC | (North Carolina, South Carolina, Georgia, and Florida) | 803-571-4366 | Robert K. Mahood<br>Southpark Bldg.,<br>Suite 306<br>1 Southpark Circle<br>Charleston, SC 29407 |
| GULF OF MEXICO | (Texas, Louisiana, Mississippi, Alabama, and Florida) | 813-228-2815 | Wayne E. Swingle<br>Lincoln Center, Suite 881<br>5401 W. Kennedy Blvd.<br>Tampa, FL 33609 |
| CARIBBEAN | (Virgin Islands and the Commonwealth of Puerto Rico) | 809-766-5926 | Miguel A. Rolon<br>Banco de Ponce Bldg.<br>Suite 1108<br>Hato Rey, PR 00918 |
| PACIFIC | (California, Washington, Oregon, and Idaho) | 503-326-6352 | Lawrence D. Six<br>Metro Center, Suite 420<br>2000 S.W. First Avenue<br>Portland, OR 97201 |
| NORTH PACIFIC | (Alaska, Washington, and Oregon) | 907-271-2809 | Clarence G. Pautzke<br>605 W.4th Ave., Rm. 306<br>P.O. Box 103136<br>Anchorage, AK 99510 |
| WESTERN PACIFIC | (Hawaii, American Samoa, Guam, and the Northern Marianas Islands) | 808-523-1368 | Kitty M. Simonds<br>1164 Bishop St., Rm.1405<br>Honolulu, HI 96813 |

## OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN ALLOCATION: BY COUNTRY AND REGION, 1989

| Item | North Atlantic (1) | Washington Oregon, and California | Gulf of Alaska | Eastern Bering Sea and Aleutian Islands (2) (3) | Total Alaska | Grand Total |
|---|---|---|---|---|---|---|
| | Metric tons, round weight | | | | | |
| Optimum yield (OY) | 479,211 | - | - | 2,003,000 | 2,003,000 | 2,482,211 |
| DAH | 351,100 | - | - | 2,000,000 | 2,000,000 | 2,351,100 |
| DAP | 269,700 | - | - | 698,366 | 698,366 | 968,066 |
| JVP | 67,200 | - | - | 1,301,634 | 1,301,634 | 1,368,834 |
| Reserve | - | - | - | - | - | - |
| TALFF | 118,111 | - | - | 3,000 | 3,000 | 121,111 |
| COUNTRY ALLOCATIONS | | | | | | |
| EEC: | | | | | | |
| Netherlands | 7,720 | - | - | - | - | 7,720 |
| United Kingdom | 3,131 | - | - | - | - | 3,131 |
| German Democratic Republic | 18,859 | - | - | - | - | 18,859 |
| Poland | 9,059 | - | - | - | - | - |
| USSR (2) | 12,815 | - | - | 1,000 | 1,000 | 13,815 |
| *Total* | *10,851* | - | - | *1,000* | *1,000* | *11,851* |

(1) Optimum Yield includes initial optimum yield for some species-see North Atlantic table.

(2) Includes 3,000 mt TALFF for snails.

(3) Includes 1,000 mt TALFF for snails.

Notes:--DAH=Domestic Annual Harvest; DAP=Domestic Annual Processing; JVP=Joint Venture Processing; TALFF=TOTAL Allowable Level of Foreign Fishing. The Pacific Seamount Region was closed to foreign and domestic fishing.

Source:--NMFS, Office of Trade and Industry Services, F/TS2.

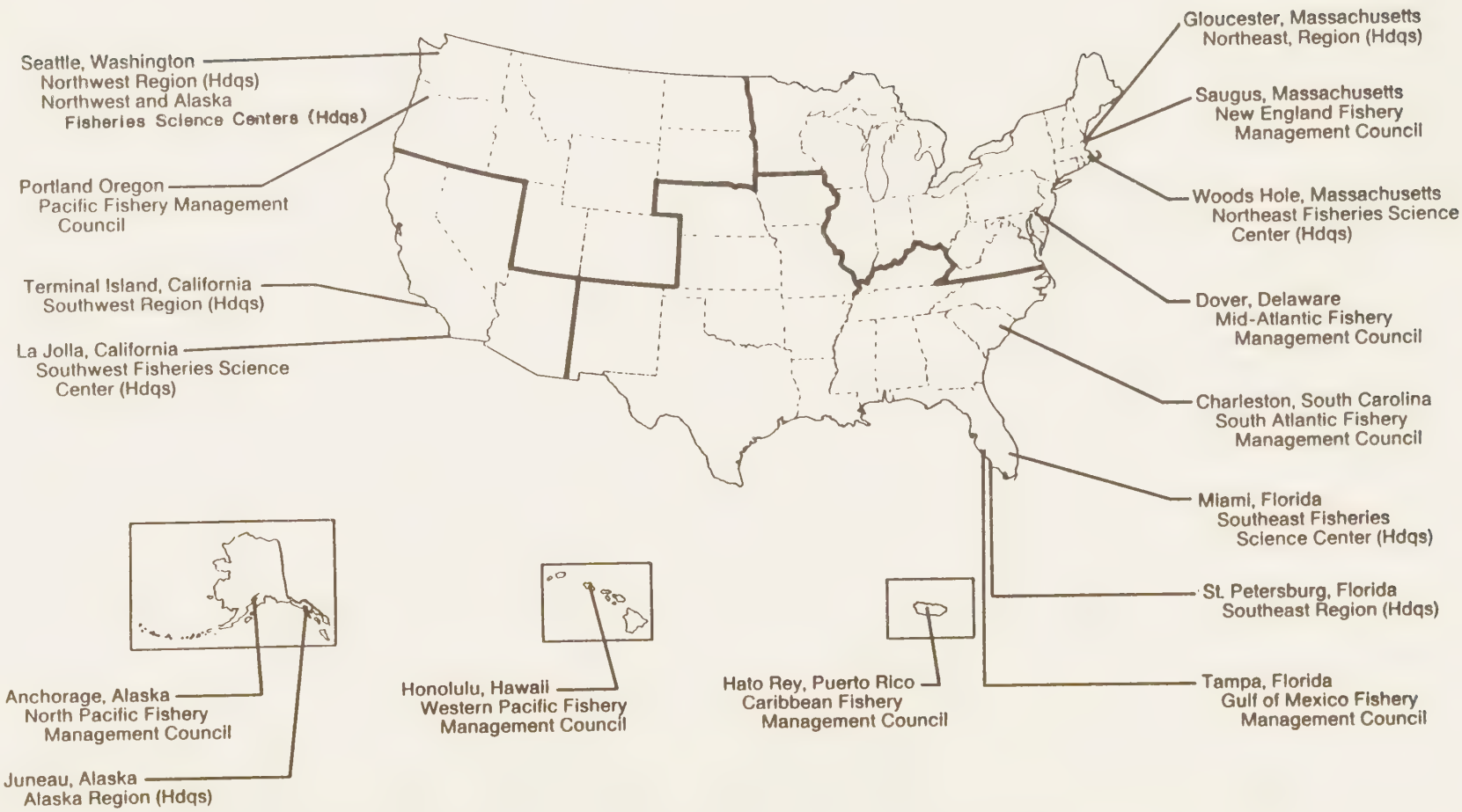
## OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS: NORTH ATLANTIC, BY SPECIES AND COUNTRY, 1989 (1)

| Item | Red hake | Silver hake | Sharks, except dogfish | Loligo squid (2) | Illex squid (2) | Atlantic mackerel (3) (4) | Butter-fish (2) | River herring | Other finfish | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | Metric tons, round weight | | | | | | | | | |
| Max Optimum yield (OY) | 22,000 | 43,000 | 6,150 | 44,000 | 30,000 | N/A | 16,000 | 8,000 | 247,000 | - |
| ABC | - | - | - | 37,000 | 22,500 | 333,000 | 16,000 | - | - | - |
| Initial Optimum yield | 22,000 | 43,000 | 6,150 | 22,020 | 15,000 | 101,000 | 10,041 | 8,000 | 247,000 | 474,211 |
| DAH | 11,500 | 29,600 | 5,000 | 20,000 | 15,000 | 50,000 | 10,000 | 7,800 | 200,200 | 349,100 |
| DAP | 5,500 | 7,600 | 5,000 | 20,000 | 14,000 | 12,000 | 10,000 | 7,800 | 180,000 | 261,900 |
| JVP | 6,000 | 22,000 | - | - | 3,000 | 16,000 | - | - | 20,200 | 67,200 |
| Reserve | 5,000 | - | - | N/A | N/A | N/A | N/A | - | - | 5,000 |
| TALFF | 5,500 | 13,400 | 1,150 | 20 | - | 51,000 | 41 | 200 | 46,800 | 118,111 |
| Country Allocations | | | | | | | | | | |
| EEC: | | | | | | | | | | |
| Netherlands | 5 | 15 | - | 2 | - | 7,624 | 4 | 20 | 50 | 7,720 |
| United Kingdom | 5 | 15 | | 2 | - | 3,034 | 5 | 20 | 50 | 3,131 |
| German Democratic Republic | 5 | 20 | - | 3 | - | 18,636 | 5 | 40 | 150 | 18,859 |
| Poland | 5 | 15 | - | 3 | - | 8,896 | 5 | 35 | 100 | 9,059 |
| USSR | 5 | 15 | - | 2 | - | 12,708 | 5 | 30 | 50 | 12,815 |
| *Total* | *25* | *80* | - | *12* | - | *50,898* | *24* | *145* | *400* | *51,584* |
| Unallocated | 5,475 | 13,320 | 1,150 | 8 | - | 102 | 17 | 55 | 46,400 | 66,527 |

(1) OY=Optimum Yield; ABC=Allowable Biological Catch; DAH=Domestic Annual Harvest; and TALFF=Total Allowable Level of Foreign Fishing; Initial Optimum Yield = DAH & TALFF or max optimum yield.
(2) These are the maximum OYs as stated in the FMP; TALFF is for by catch purposes.
(3) DAH includes 14,000 metric tons for recreational catch.
(4) No TALFF released.

Source:--NMFS, Office of Trade and Industry Service, F/TS2.

# NMFS Regional Offices
# NMFS Fisheries Science Centers
# Regional Fishery Management Councils
## HDQS Locations



# GENERAL ADMINISTRATIVE INFORMATION

## UNITED STATES DEPARTMENT OF COMMERCE

*14th and E Streets, NW*
*Washington, D.C. 20230*

| *Mail routing code* | | *Telephone number* |
|---|---|---|
| -- | ***Secretary of Commerce***<br>Robert A. Mosbacher | 202-377-2112 |
| A | ***National Oceanic and Atmospheric Administration***<br>John A. Knauss | 202-377-3436 |

## NATIONAL MARINE FISHERIES SERVICE

*1335 East-West Highway*
*(Silver Spring Metro Center #1)*
*Silver Spring, MD 20910*

| | | |
|---|---|---|
| F | ***Assistant Administrator for Fisheries***<br>William W. Fox, Jr. | 301-427-2239 |
| Fx1 | Deputy Assistant Administrator for Fisheries | 301-427-2239 |
| Fx2 | Program Management Officer | 301-427-2239 |
| Fx3 | Senior Scientist for Fisheries | 301-427-2239 |
| F/MS | **Management Services Office** | 301-427-2245 |
| F/BP | **Budget and Planning Office** | 301-427-2245 |
| F/PC | **Policy and Coordination Office** | 301-427-2245 |
| F/SC | **National Seafood Marketing Council (*)** | 202-673-5237 |
| F/EN | **Office of Enforcement** | 301-427-2300 |
| F/CM | **Office of Fisheries Conservation and Management** | 301-427-2334 |
| F/CM1 | Operations Support and Analysis Division | 301-427-2353 |
| F/CM2 | Plans and Regulations Division | 301-427-2343 |
| F/CM3 | Recreational and Interjurisdictional Fisheries Division | 301-427-2325 |
| F/RE | **Office of Research and Environmental Information** | 301-427-2367 |
| F/RE1 | Fisheries Statistics Division | 301-427-2328 |
| F/RE2 | Data Management Division | 301-427-2372 |
| F/RE3 | Prediction, Analysis and Monitoring Division | 301-427-2363 |
| F/PR | **Office of Protected Species** | 301-427-2332 |
| F/PR1 | Permits and Documentation Division | 301-427-2289 |
| F/PR2 | Protected Species Management Division | 301-427-2322 |
| F/PR3 | Habitat Policy and Conservation Division | 301-427-2347 |
| F/PR4 | Conservation Science Division | 301-427-2319 |

(Continued)

(*) Office is located at 1825 Connecticut Ave., NW (Universal Bldg., South) Room 618, Washington, DC 20235.

## NATIONAL MARINE FISHERIES SERVICE
Silver Springs, Md. 20910

| *Mail routing code* | | *Telephone number* |
|---|---|---|
| F/TS | **Office of Trade and Industry Services** | 301-427-2351 |
| F/TS1 | Financial Services Division | 301-427-2390 |
| F/TS2 | Trade Services Division | 301-427-2379 |
| F/TS3 | Utilization Research and Services Division | 301-427-2358 |
| F/TS4 | Inspection Service Division | 301-427-2355 |
| F/IA | **Office of International Affairs** | 301-427-2272 |
| F/IA1 | Organizations and Agreements Division | 301-427-2276 |
| F/IA2 | International Science, Development and Polar Affairs Division | 301-427-2288 |
| LA3-F | **Constituent Affairs Staff - Fisheries** | 301-427-2259 |
| LA5-F | **Office of Congressional Affairs - Fisheries** | 301-427-2263 |
| PAF | **Office of Public Affairs - Fisheries** | 301-427-2370 |
| GCF | **Office of General Counsel - Fisheries** | 301-427-2231 |

# REGIONAL FACILITIES

| *Location* | *Telephone number* | |
|---|---|---|
| Gloucester, MA | 508-281-9300 | Northeast Region, One Blackburn Drive<br>Gloucester, MA 01930 |
| Woods Hole, MA | 508-548-5123 | Northeast Fisheries Science Center<br>Woods Hole, MA 02543 |
| Woods Hole, MA | 508-548-5123 | Woods Hole Laboratory<br>Woods Hole, MA 02543 |
| Narragansett, RI | 401-789-9326 | Narragansett Laboratory, Route 7A, P.O. Box 522A<br>Narragansett, RI 02882 |
| Milford, CT | 203-878-2459 | Milford Laboratory<br>Milford, CT 06460 |
| Highlands, NJ | 201-872-0200 | Sandy Hook Laboratory, P.O. Box 428<br>Highlands, NJ 07732 |
| Oxford, MD | 301-226-5193 | Oxford Laboratory<br>Oxford, MD 21654 |
| Gloucester, MA | 508-281-3600<br>Ext. 237 | Gloucester Laboratory, Emerson Ave.<br>Gloucester, MA 01930 |
| Washington, DC | 202-357-2550 | National Systematics Laboratory<br>10th and Constitution Ave., N.W.<br>Washington, DC 20560 |

(Continued)

# GENERAL ADMINISTRATIVE INFORMATION

## NATIONAL MARINE FISHERIES SERVICE

### REGIONAL FACILITIES - Continued

| Location | Telephone number | |
|---|---|---|
| St. Petersburg, FL | 813-893-3141 | Southeast Region, 9450 Koger Blvd.<br>St. Petersburg, FL 33702 |
| Miami, FL | 305-361-4284 | Southeast Fisheries Science Center, 75 Virginia Beach Dr.<br>Miami, FL 33149 |
| Miami, FL | 305-361-4225 | Miami Laboratory, 75 Virginia Beach Dr.<br>Miami, FL 33149 |
| Pascagoula, MS | 601-762-4591 | Mississippi Laboratories, 3209 Frederick St.<br>P.O. Drawer 1207<br>Pascagula, MS 39567 |
| Panama City, FL | 904-234-6541 | Panama City Laboratory, 3500 Delwood Beach Rd.<br>Panama City, FL 32407 |
| Galveston, TX | 409-766-3500 | Galveston Laboratory, 4700 Avenue U<br>Galveston, TX 77550 |
| Charleston, SC | 803-762-1200 | Charleston Laboratory, 217 Fort Johnson Rd.<br>P.O. Box 12607<br>Charleston, SC 29412 |
| Beaufort, NC | 919-728-3595 | Beaufort Laboratory, Pivers Island<br>Beaufort, NC 28516 |
| Seattle, WA | 206-526-6150 | Northwest Region, 7600 Sand Point Way, N.E.<br>BIN C15700, Bldg. 1<br>Seattle, WA 98115 |
| Seattle, WA | 206-442-1872 | Northwest Fisheries Science Center<br>2725 Montlake Boulevard, East<br>Seattle, WA 98112 |
| Terminal Island, CA | 213-514-6196 | Southwest Region, 300 South Ferry St.<br>Terminal Island, CA 90731 |
| La Jolla, CA | 619-546-7000 | Southwest Fisheries Science Center<br>8604 La Jolla Shores Dr., P.O. Box 271<br>La Jolla, CA 92038 |
| Honolulu, HI | 808-943-1221 | Honolulu Laboratory, 2570 Dole St., P.O. Box 3830<br>Honolulu, HI 96812 |
| Tiburon, CA | 415-435-3149 | Tiburon Laboratory, 3150 Paradise Dr.<br>Tiburon, CA 94920 |
| Monterey, CA | 408-646-3311 | Pacific Fisheries Environmental Group<br>P.O. Box 831<br>Monterey, CA 93942 |

(Continued)

## NATIONAL MARINE FISHERIES SERVICE

### REGIONAL FACILITIES - Continued

| Location | Telephone number | |
|---|---|---|
| Juneau, AK | 907-586-7221 | Alaska Region, Federal Bldg., Room 453<br>709 West Ninth St., P.O. Box 21668<br>Juneau, AK 99802 |
| Seattle, WA | 206-526-4000 | Alaska Fisheries Science Center,<br>7600 Sand Point Way, N.E.<br>BIN C15700, Bldg. 4<br>Seattle, WA 98115 |
| Kodiak, AK | 907-487-4961 | Kodiak Investigations, P.O. Box 1638<br>Kodiak, AK 99615 |
| Auke Bay, AK | 907-789-6000 | Auke Bay Laboratory, P.O. Box 210155<br>Auke Bay, AK 99821 |

### REFERRAL DIRECTORY - SILVER SPRING, MD OFFICE

*FEES AND PERMITS -- 301-427-2339*

Foreign fishing
Joint ventures

*FINANCIAL SERVICES -- 301-427-2390*

Compensation for loss of gear
Construction, vessels (Tax Deferral Program)
Insurance - vessel seizure by foreign governments
Loans and loan guarantees

*FISHERY MANAGEMENT OPERATIONS -- 301-427-2343*

Artifical reefs
Fishery management plans
Fisheries regulations
State grants

*INDUSTRY SERVICES -- 301-427-2351*

Consumer education and marketing
Exports/Imports licenses
Saltonstall-Kennedy (S-K) grants
Tariffs
Trade issues

*INTERNATIONAL FISHERIES -- 301-427-2272*

Allocation (foreign fishing catches)
Foreign fisheries (general)

*LAW ENFORCEMENT AND FINES -- 301-427-2300*

*PROTECTED SPECIES -- 301-427-2332*

Lacey Act (general information)
Marine Mammal Protection Act (general)
Permits and regulations

*RESOURCES INVESTIGATIONS -- 301-427-2367*

Acid rain and pollution
Aquaculture information
Diseases of fish
Ecology and fish recruitment
Fishing methods
Resource abundance

*STATISTICAL DATA SERVICES -- 301-427-2328*

Commercial fisheries - landings and value
Imports and exports
Joint ventures
Market news reports (general)
Operating units (fishermen and vessels)
Processed fishery products
Recreational fisheries

*UTILIZATION RESEARCH -- 301-427-2358*

Botulism and ciguatera poisoning
Nutrition and quality of fishery products
Safety and product standards
Seafood inspection and identity

# GENERAL ADMINISTRATIVE INFORMATION

## NATIONAL MARINE FISHERIES SERVICE

### NATIONAL FISHERY STATISTICS OFFICES

| City | Telephone number | Name and address |
|---|---|---|
| | | *NORTHEAST REGION* |
| NEW ENGLAND | | |
| Portland | 207-780-3322 | Robert C. Morrill or Bill Trusewich, Federal Court House, 156 Federal St., Rm. 17, P.O. Box 425, DTS, Portland, ME 04101 |
| Rockland | 207-594-5969 | Peter S. Marckoon, Federal Bldg., 21 Limerock St., Rm. 207, P.O. Box 708, Rockland, ME 04841 |
| (1) Boston | 617-223-8012 | Louis O'Donnel, 408 Atlantic Ave., Rm. 141, Boston, MA 02210 |
| Boston | 617-223-8015 | Paul Sheahan, 408 Atlantic Ave., Rm. 141 Boston, MA 02210 |
| Gloucester | 508-281-9304 | Vito P. Giacalone, Rm. 107, 1 Blackburn Dr. Gloucester, MA 01930 |
| New Bedford | 508-999-2452 | Dennis E. Main, U.S. Custom House, 2nd and Williams Sts., New Bedford, MA 02740 |
| New Bedford | 508-994-9200 | Paul O. Swain, Address same as above |
| Chatham | 508-945-5961 | Lorraine Belfiore, 29C Stage Harbor Road Chatham, MA 02633 |
| (2) Woods Hole | 508-548-5123 Ext. 264 | Ronnee L. Schultz, Northeast Fisheries Center, Water St., Woods Hole, MA 02543 |
| Newport | 401-847-3115 | Lori Lathan, Post Office Bldg., Thames St., Newport, RI 02840 |
| Pt. Judith | 401-783-7797 | Susan Murphy, 310 Great Island Rd., Rm. 203, P.O. Box 547, Pt. Judith, RI 02882 |
| MIDDLE ATLANTIC | | |
| (1) New York | 212-620-4505 | Russell Meredith, 201 Varick St., Rm. 1145, New York, NY 10014 |
| Riverhead | 516-727-0707 | Al Usinger, 518-B E. Main St., P.O. Box 873, Riverhead, L.I., NY 11901 |
| Patchogue | 516-475-6988 | Fred C. Blossom, 22 W. Main St., P.O. Box 606, Patchoque, L.I., NY 11772 |
| Toms River | 201-349-3533 | Eugene A. LoVerde, 26 Main St., P.O. Box 143, Toms River, NJ 08753 |
| Cape May | 609-884-2113 | Patricia A. Yoos, 1382 Lafayette St., P.O. Box 624, Cape May, NJ 08204 |
| CHEAPEAKE | | |
| Oxford | 301-226-5420 | William E. Brey, Oxford Laboratory, P.O. Box 338, Oxford, MD 21654 |
| Greenbackville | 804-824-4725 | George E. Ward, Biological Lab., Franklin City, Greenbackville, VA 23356 |
| Hampton | 804-723-3369 | Anthony Silvia, 55-57 West Queenway Mall, P.O. Box 436, Hampton, VA 23669 |
| | | *SOUTHEAST REGION* |
| SOUTH ATLANTIC | | |
| Beaufort | 919-728-4168 | Kenneth C. Harris, Pivers Island, Beaufort Laboratory, Box 500, Beaufort, NC 28516 |
| Manteo | 919-473-5929 | Glenwood P. Montgomery, Marine Resource Center, P.O. Box 967, Manteo, NC 27954 |
| Charleston | 803-762-1200 | John C. DeVane, Jr., 217 Ft. Johnson Rd., P.O. Box 12607, James Island, SC 29412 |
| Brunswick | 912-265-7080 | Daniel G. Foster, Federal Bldg., 801 Gloucester St., Rm. 104, Brunswick, GA 31520 |
| New Smyrna Beach | 904-427-6562 | Claudia Dennis, 200 Canal St., Room 200 New Smyrna Beach, FL 32168 |
| (2) Miami | 305-361-4462 | J. Ernest Snell or Guy S. Davenport, 75 Virginia Beach Dr., Miami, FL 33149 |
| Tequesta | 407-575-5407 | Howard C. Schaefer, 19100 S.E. Federal Highway Tequesta, FL 33469 |

(Continued)

# GENERAL ADMINISTRATIVE INFORMATION

## NATIONAL MARINE FISHERIES SERVICE

### NATIONAL FISHERY STATISTICS OFFICES

| City | Telephone number | Name and address |
|---|---|---|
| GULF | | |
| Key West | 305-294-1921 | Edward J. Little, Jr., Post Office & Custom House Bldg., P.O. Box 269, Key West, FL 33040 |
| Fort Myers | 813-334-4364 | Tom Herbert, Federal Bldg., P.O. Box 217, Fort Myers, FL 33902 |
| St. Petersburg | 813-893-3151 | Betty J. Guisinger, 9450 Koger Blvd., St. Petersburg, FL 33702 |
| Apalachicola | 904-653-9500 | Richard Dumas, Post Office Bldg., P.O. Drawer 189, Apalachicola, FL 32320 |
| Panama City | 904-234-6541 | Deborah Fable, 3500 Delwood Beach Rd., Panama City, FL 32401 |
| Bayou La Batre | 205-824-4149 | Horace M. Flowers, D&H Furniture Bldg., Second Floor 93 S. Wintzell Ave., P.O. Box 591, Bayou La Batre, AL 36509 |
| Pascagoula | 601-762-4591 | Hermes G. Hague, 3209 Frederic St., SEFC Pascagoula Lab., P.O. Box Drawer 1207, Pascagoula, MS 39567 |
| Cameron | 318-762-3887 | Vacant, Sabine National Wildlife Refuge, Highway 27 South, 3000 Main Street, Hackberry, LA 70645 |
| Golden Meadow | 504-475-7072 | Gary J. Rousse, 1614 So. Bayou Dr., Rm. 211, P.O. Box 623, Golden Meadow, LA 70357 |
| Houma | 504-872-3321 | Kathleen M. Hebert, Post Office Bldg., 425 Lafayette St., Rm. 128, Houma, LA 70360 |
| New Iberia | 318-365-1558 | Linda F. Picou, 327 S. Iberia St., Suite 8, New Iberia, LA 70560 |
| New Orleans | 504-589-6153 | Leryes "Lee" Usie, World Trade Center, 2 Canal St., Suite 400-H, New Orleans, LA 70130 |
| (1) New Orleans | 504-589-6151 | Paul Hebert, World Trade Center, 2 Canal St., Suite 400-H, New Orleans, LA 70130 |
| Aransas Pass | 512-758-3787 | Thomas N. Scott, Landry Net Shop, Conn Brown Harbor, P.O. Box 1776, Aransas Pass., TX 78336 |
| Brownsville/ Port Isabel | 512-548-2516 | Kit Doncaster or Edie Lopez, Harbor Masters Bldg., Shrimp Basin, P.O. Box 467, Brownville, TX 78520 |
| Freeport | 409-233-4551 | Richard A. Allen, 307 East Park, P.O. Box 2533, Freeport, TX 77541 |
| Galveston | 409-766-3705 | Margot Hightower or John P. Davidson II 4700 Avenue U, Bldg. 308, Galveston, TX 77551 |
| Port Arthur | 409-724-4303 | Madeline Bailey, Federal Bldg., 2875 75th St., Rm. 113, Port Arthur, TX 77640 |
| | | *SOUTHWEST REGION* |
| (1) (2) Terminal Isl., CA or Honolulu, HI | 213-514-6674 | Patricia J. Donley, 300 S. Ferry St., P.O. Box 3266, Terminal Island, CA 90731 |
| | | *NORTHWEST REGION* |
| (1) (2) Seattle | 206-526-6128 | John K. Bishop, 7600 Sand Point Way, N.E., Bldg., 1, BIN C15700, Seattle, WA 98115 |
| | | *ALASKA REGION* |
| (2) Juneau | 907-586-7228 | Janet E. Smoker, 709 W. Ninth St., Federal Bldg., P.O. Box 21668, Juneau, AK 99802 |

(1) Regional Market News offices.
(2) Regional headquarters for statistics offices.

# PUBLICATIONS

## PUBLICATIONS AVAILABLE FROM NATIONAL MARINE FISHERIES SERVICE, NOAA

*SCIENTIFIC PUBLICATIONS*

Information on formal scientific publications by NMFS (such as NMFS journals and Technical Publications) may be obtained from the Scientific Publications Office (F/NWR1), 7600 Sand Point Way N.E., BIN C-15700, Seattle WA 98115. Telephone: 206-526-6107.

*CURRENT FISHERY STATISTICS (CFS) SERIES*

The reports listed below are in the Current Fishery Statistics (CFS) series. They are statistical bulletins on marine recreational fishing, commercial fishing, and on the manufacture and commerce of fishery products. For further information or to obtain a subscription to these publications, contact the office shown below:

NOAA, National Marine Fisheries Service
Fisheries Statistics Division (F/RE1)
1335 East-West Highway
Silver Spring, MD 20910
Telephone: 301-427-2328

Marine recreational fishing publications are released annually. If you wish a copy of the following publications, check the designated space () and return to the Office shown above.

() Marine Recreational Fishery Statistics Survey, Pacific Coast, 1986 C.F.S. No. 8393

() Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1986 C.F.S. No. 8392

() Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1983-1984 C.F.S. No. 8326

() Marine Recreational Fishery Statistics Survey, Pacific Coast, 1983-1984 C.F.S. No. 8325

() Marine Recreational Fishery Statistics Survey, Pacific Coast, 1981-1982 C.F.S. No. 8323

() Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1979 (Revised)-1980 C.F.S. No. 8322

() Marine Recreational Fishery Statistics Survey, Pacific Coast, 1979-1980 C.F.S. No. 8321

The bulletins shown below cover freezings and holdings, the production of various processed products, and the U.S. foreign trade in fishery products. The annual data shown in the publication are later published in Fishery Statistics of the United States. To order publications from the Government Printing Office (GPO) or the National Technical Service (NTIS), see the two pages that follow.

The following are available annually:

() FF Frozen Fishery Products

() MF Processed Fishery Products: (Includes (MF 1-5) Canned Fishery Products: Production of Fish Fillets and Steaks; Fish Sticks, Fish Portions and Breaded Shrimp; and Industrial Fishery Products.)

() MF-6 Imports and Exports of Fishery Products

The following publication is only available quarterly; monthly data will be available in the annual Processed Fishery Products (MF-1):

() Fish Meal and Oil

*LIBRARY INFORMATION*

Library information is available from NOAA's library, 6009 Executive Blvd., Rockville, MD 20852. Telephone: 301-443-8334

# PUBLICATIONS

## PUBLICATIONS AVAILABLE FROM U.S. GOVERNMENT PRINTING OFFICE

*TECHNICAL REPORTS*

Stock Number

003-009-00522-1 International Trade Administration Report, "1989 U.S. Industrial Outlook" - a one-year forecast on the U.S. fishing industry plus one and five-year forecasts on other U.S. industries. January 1989 . . .$24.00

*STATISTICAL REPORTS*

003-020-00157-2 Fisheries of the United States, 1987. . .$6.00 each

003-020-00159-9 Fisheries of the United States, 1988. . .$6.50

*MISCELLANEOUS REPORTS*

003-017-00531-3 Bering, Chukchi and Seas Strategic Assessment: Data Atlas 1988. . .$184.00

003-009-00547-7 United States Industrial Outlook 1989: Prospects for Industries. . .$24.00

003-020-00156-4 Illustrated Key to Penaeoid shrimp of Commerce in the Americas. . .$2.00

003-017-00523-2 Gulf of Mexico Coastal and Ocean Zones Strategic Assessment: Data Atlas . . .$138.00

*MARINE LIFE POSTERS*

(printed on washable non-glare plasticized paper)

003-020-00055-0 Marine Fishes of the California Current and adjacent waters . . .$5.50

003-020-00065-7 Marine Fishes of the Gulf and South Atlantic. . .$5.50

003-020-00069-0 Fishes of the Great Lakes . . .$8.00

003-020-00087-8 Mollusks and Crustaceans of the Coastal U.S. . .$5.50

*SEAFOOD COOKBOOKS*

003-020-00052-5 Fish and Shellfish Over the Coals. . .$1.75

003-020-00074-6 A Little Fish Goes a Long Way . . .$1.50

003-020-00145-9 Vitalize Your Life - Discover Seafood Your Guide To Nutrition From the Sea . . .$1.00

To purchase publication listed on this page (Advance Payment Required), call or write:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20202
202-783-3238

## PUBLICATIONS AVAILABLE FROM NATIONAL TECHNICAL INFORMATION SERVICE (NTIS), U.S. DEPARTMENT OF COMMERCE

### *COMMERCIAL FISHERIES*

Fisheries of the United States is a preliminary report with historical comparisons on the Nation's fishing, fish processing, and foreign trade in fishery products.

| Year | Accession number | Year | Accession number |
|---|---|---|---|
| 1966 | COM-75-10662 | 1978 | PB-297083 |
| 1967 | COM-75-10663 | 1979 | PB-80-201593 |
| 1968 | COM-75-10664 | 1980 | PB-81-241648 |
| 1969 | COM-75-10665 | 1981 | PB-82-215542 |
| 1970 | COM-71-50081 | 1982 | PB-83-216473 |
| 1971 | COM-75-10666 | 1983 | PB-84-195148 |
| 1972 | COM-73-50644 | 1984 | PB-86-144953 |
| 1973 | COM-74-50546 | 1985 | PB-87-143145 |
| 1974 | COM-75-10862 | 1986 | PB-88-164132 |
| 1975 | PB-253966 | 1987 | PB-88-215173 |
| 1976 | PB-268662 | 1988 | PB-89-216485 |
| 1977 | PB-282741 | | |

Fishery Statistics of the United States (Statistical Digest) is a final report on the Nation's commercial fisheries showing more detail than Fisheries of the United States.

| Year | Accession number | Year | Accession number |
|---|---|---|---|
| 1939 | COM-75-11265 | 1959 | COM-75-11062 |
| 1940 | COM-75-11266 | 1960 | COM-75-11063 |
| 1941 | COM-75-11267 | 1961 | COM-75-11064 |
| 1942 | COM-75-11268 | 1962 | COM-75-11065 |
| 1943 | COM-75-11269 | 1963 | COM-75-11066 |
| 1944 | COM-75-11270 | 1964 | COM-75-11067 |
| 1945 | COM-75-11271 | 1965 | COM-75-11068 |
| 1946 | COM-75-11272 | 1966 | PB-246429 |
| 1947 | COM-75-11273 | 1967 | PB-246430 |
| 1948 | COM-75-11274 | 1968 | COM-72-50249 |
| 1949 | COM-75-11275 | 1969 | COM-75-10887 |
| 1950 | COM-75-11056 | 1970 | COM-75-10643 |
| 1951 | COM-75-11053 | 1971 | COM-74-51227 |
| 1952 | COM-75-11054 | 1972 | COM-75-11430 |
| 1953 | COM-75-11055 | 1973 | PB-262058 |
| 1954 | COM-75-11057 | 1974 | PB-277796 |
| 1955 | COM-75-11058 | 1975 | PB-300625 |
| 1956 | COM-75-11059 | 1976 | PB-81-163438 |
| 1957 | COM-75-11060 | 1977 | PB-84-192038 |
| 1958 | COM-75-11061 | | |

### *STATE LANDINGS*

Maine, 1946-76, PB-271296/1977-79, PB-81-128258.
Massachusetts, 1943-76, PB-275866/1977-79, PB-81-143182.
Rhode Island, 1954-77, PB-287627/1978-79, PB-81-157158.
New York, 1954-76, PB-275449/1977-79, PB-81-134546.

### *STATE LANDINGS - CONTINUED*

New Jersey, 1952-76, PB-275696/1977-79, PB-81-159048.
Maryland, 1960-76, PB-300636/1977-79, PB-81-159003.
Virginia, 1960-76, PB-300637/1977-79, PB-82-151960.
North Carolina, 1955-76, PB-288928/1977-79, PB-82-151978.
South Carolina, 1957-76, PB-289405/1977-79, PB-81-163198.
Georgia, 1956-77, PB-289814/1977-78, PB-81-157166.
Florida, 1950-76, PB-292068.
Alabama, 1950.-77, PB-80-121262/1978, PB-82-168071.
Mississippi, 1951-77, PB-80-121270/1978, PB-82-169079.
Louisiana, 1957-77, PB-300583/1978, PB-82-168063.
Texas, 1949-77, PB-300603/1978-79, PB-82-169004.
Shrimp, 1956-76, PB-80-124696/1977-78, PB-82-156183.
Gulf Coast Shrimp Data, 1958-76, PB-80-126899/1977, PB-82-170390.

### *PROCESSED FISHERY PRODUCTS ANNUAL SUMMARY*

| | | | |
|---|---|---|---|
| 1979 | PB-89-215248/AS | 1983 | PB-89-215271/AS |
| 1980 | PB-89-215255/AS | 1984 | PB-89-215297/AS |
| 1981 | PB-89-215263/AS | 1985 | PB-89-215305/AS |
| 1982 | PB-89-215289/AS | 1986 | PB-89-215313/AS |

### *MARINE RECREATIONAL FISHING*

1970 Salt-Water Angling Survey, PB-265416.

Determination of the Number of Commercial and Non-Commercial Recreational Boats in the United States, Their Use, and Selected Characteristics, COM-74-11186.

Participation in Marine Fishing:
Northeastern United States, 1973-74, COM-75-10655.
Southeastern United States, 1974, PB-273160.

Marine Recreational Fishery Statistics Survey:

Atlantic and Gulf Coasts:

| | |
|---|---|
| 1979-80 | PB-84-199652 |
| 1979 (Revised)-1980 | PB-89-102552 |
| 1981-1982 | PB-89-102560 |
| 1983-1984 | PB-89-102628 |
| 1985 | PB-89-102669 |
| 1986 | PB-89-102701 |

Pacific Coast:

| | |
|---|---|
| 1981-1982 | PB-89-102925/AS |
| 1983-1984 | PB-89-102933/AS |
| 1985 | PB-89-102941/AS |
| 1986 | PB-89-102958/AS |

To purchase the reports listed on this page, call or write:

NTIS
ATTN: Order Desk
5285 Port Royal Road
Springfield, VA 22161
703-487-4650

# PUBLICATIONS

## *OTHER PUBLICATIONS*

Processors and Wholesale Dealers of Fishery Products in U.S. (excludes Alaska) 1988 (shows firm name, address, and major products), PB-90-167545/AS.

Processors and Wholesalers of Alaska Fishery Products, 1978, PB-299246.

Directory of Aquaculture in the Southeast, 1976, PB-2721512.

Aquaculture and Capture Fisheries: Impacts in U.S. Seafood Markets, PB-88-204185/GBA.

Revenues, Costs, and Returns from Vessel Operation in Major U.S. Fisheries, PB-265275.

Development of Value Added, Margin and Expenditures for Marine Fishery Products, PB-89-125108.

Seafood Plant Sanitation, PB-271161.

List of Fishery Cooperatives in U.S. 1980-81, PB-82-107830.

Economic Impacts of the U.S. Commercial Fishing Industry, COM-75-11354.

A Survey of Fish Purchases by Socio-Economic Characteristics - Annual Report, COM-71-00647.

National Marine Fisheries Service: Seafood Consumption, 1973-1974, (a magnetic tape) PB-294725.

National Marine Fisheries Service: Species/ Mercury Data (a magnetic tape) PB-283265.

The Maryland Blue Crab and Oyster Processing Industries: The Effects of Government Regulations, PB-82-159054.

## *ECONOMIC PROFILES*

The U.S. Blue Crab Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-165704.

The Maine Sardine Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-165712.

The U.S. Menhaden Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-165720.

The U.S. Oyster Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-166215.

The U.S. Shrimp Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-166233 (includes canned shrimp, breaded shrimp, and headless peeled shrimp).

The New England Groundfish Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-166231.

Analysis of Seafood Consumption in the U.S. 1970, 1979, 1978, and 1981, PB-86-135043.

The U.S. Seafood Processing Industry: An Economic Profile for Policy and Regulatory Analysis, PB-83-199265.

## *BASIC ECONOMIC INDICATORS*

American and Spiny Lobster, 1947-73, COM-47-11587.

Atlantic and Pacific Groundfish, 1932-72, COM-74-11638.

Blue Crab, 1947-72, COM-74-11585.

Clams, 1947-74, COM-75-11089.

Halibut, 1929-72, COM-74-11583.

King and Dungeness Crabs, 1947-72, COM-74-11586.

Menhaden, 1946-72, COM-74-11581.

Oyster, 1947-72, COM-75-10384.

Salmon, 1947-72, COM-74-11710.

Scallops, 1930-72, COM-74-11582.

Shrimp, 1947-72, COM-74-11709.

Tuna, 1947-72, COM-74-11584.

To purchase the reports listed on this page, call or write:

NTIS
ATTN: Order Desk
5285 Port Royal Road
Springfield, VA 22161
703-487-4650

# SERVICES

## SEA GRANT MARINE ADVISORY SERVICE

The Office of Sea Grant is a major program element of the National Oceanic and Atmospheric Administration. The National Sea Grant College Program is funded jointly by the Federal Government and colleges or universities. Sea Grant's Marine Advisory Service offers a broad range of information to recreational and commercial fishermen, fish processors, and others concerning the Nation's fisheries. The following program leaders can provide information on Sea Grant Activities:

William Hosking, Coordinator
Sea Grant Advisory Service
3940 Government Boulevard
Suite 5
Mobile, AL 36609
(205) 661-5004

Donald E. Kramer, Leader
Alaska Marine Advisory
Program, Suite 220
2221 East Northern Lights Blvd.,
P.O. Box 103160
Anchorage, AK 99508
(907) 274-9691

Ronald Skoog, Coordinator
Marine Advisory Program
Cooperative Extension Service
University of California
Davis, CA 95616
(916) 752-6191

James Fawcett, Director, MAS
Univ. of Southern California
Sea Grant - University Park
Los Angeles, CA 90089
(213) 743-5904

Norman Bender, Program Leader
Sea Grant Co-op Ext. Service
Marine Science Institute
University of Connecticut
Groton, CT 06340
(203) 445-3458

James Falk, Director
Sea Grant Marine Advisory
Service
College of Marine Studies
University of Delaware
Lewes, DE 19958
(302) 645-4235

Marion L. Clarke, Director
Sea Grant Extension Program
University of Florida
117 Newins/Ziegler Hall
Gainesville, FL 32611
(904) 392-1837

Duncan Amos, Director
Marine Extension Service
University of Georgia
P.O.Box 2
Brunswick, GA 31523
(912) 264-7268

Bruce Miller, Director
Sea Grant Extension Service
University of Hawaii
1000 Pope Road, Room 217
Honolulu, HI 06822
(808) 948-8191

Joseph O'Leary, Coordinator
Illinois/Indiana Sea Grant
Department of Forestry and
Natural Resources
Purdue University
West Lafayette, IN 47907
(317) 494-3622

Ronald Becker, Assoc. Director
Marine Advisory Service
Center for Wetland Resources
Louisiana State University
Baton Rouge, LA 70803
(504) 388-6345

David Dow, Program Leader
Sea Grant Marine Adv. Program
University of Maine
Coburn Hall
Orono, ME 04469
(207) 581-1443

Ralph Adkins, Director
Sea Grant Extension Program
Maryland Cooperative Extension
Service
University of Maryland
College Park, MD 20742
(301) 454-4848

Norm Doelling, Exec. Director
MIT Sea Grant Program
MASS. Insti. of Technology
77 Massachusetts Avenue
Building E38-330
Cambridge, MA 02139
(617) 253-7135

Allen White
Marine Science Advisory Program
Woods Hole Ocean. Institute
Woods Hole, MA 02543
(508) 548-1400

John Schwartz, Program Leader
Sea Grant Extension Service
Michigan State University
334 Natural Resource Building
East Lansing, MI 48824
(517) 353-9568

Dale Baker, Director
Sea Grant Extension Program
University of Minnesota
208 Washburn Hall
Duluth, MN 55812
(218) 726-8106

David Veal, Program Leader
Sea Grant Advisory Service
MS/AL SG Consortium, Suite I-E
4646 West Beach Boulevard
Biloxi, MS 39531
(601) 388-4710

Brian Doyle, Program Leader
Sea Grant Marine Advisory Program
University of New Hampshire
NEC Administration Building
15 Garrison Avenue
Durham, NH 03824
(603) 862-3460

Alex Wypzyinski, Director
Sea Grant Extension Service
Rutgers University
P.O. Box 231, Cook College
New Brunswick, NJ 08903
(201) 932-9636

Michael Voiland, Program Leader
Sea Grant Extension Program
31 Robert Hall
Cornell University
Ithaca, NY 14853
(607) 255-2832

James Murray, Director
Marine Advisory Service
North Carolina State University
105 1911 Building
Raliegh, NC 27695
(919) 737-2454

Jeffrey M. Reutter, Director
Ohio Sea Grant Advisory Service
1541 Research Center
1314 Kinneal Rd.
Columbus, OH 43210
(614) 292-8949

## SEA GRANT MARINE ADVISORY SERVICE

Bruce De Young, Head
Extension/Sea Grant Program
Oregon State University
208 Ballard Extension Hall
Corvallis, OR 97331
(503) 737-0702

Ruperto Chaparro
MAS Program Leader
University of Puerto Rico
Department of Marine Sciences
Mayaguez, PR 00708
(809) 834-4040, Ext. 3439, 3447

Carole Jaworski, Coordinator
URI Marine Advisory Service
University of R.I., S. Ferry Rd.
Narragansett Bay-Watkins Building
Narragansett, RI 02882
(401) 792-6211

Mel Goodwin, Outreach Coordinator
Clemson/Sea Grant Marine
Extension Program
287 Meeting Street
Charleston, SC 29401
(803) 727-2078

Mike Hightower, Director
Sea Grant Extension Program
Texas A&M University
College Station, TX 77843
(409) 845-3854

William DuPaul, Coordinator
Sea Grant Marine Advisory Service
Virginia Inst. of Marine Science
Gloucester Point, VA 23062
(804) 642-7163

Michael S. Spranger, Pro. Leader
Marine Advisory Service
Washington Sea Grant Program
University of Washington
3716 Brooklyn Avenue, N.E.
Seattle, WA 98105
(206) 583-6600

Allen Miller, Coordinator
Sea Grant Advisory Service
University of Wisconsin-Madison
1800 University Avenue
Madison, WI 53705
(608) 262-0644

---

**National Sea Grant Depository**
(Clearing house for all Sea Grant Publications)

Pell Library
University of Rhode Island
Bay Campus
Narragansett, RI 02882
(401) 792-6114

# SERVICE

## TRADE AND INDUSTRY SERVICES

The National Marine Fisheries Service (NMFS) conducts activities designed to improve the competitiveness of the U.S. fishing industry in domestic and world markets and to enhance the safety and quality of U.S. seafood products. Programs include: (1) identification of U.S. industry trade issues and problems and advising U.S. trade agencies on fishery trade matters; (2) financial assistance in the form of loan guarantees, insurance programs, a capital construction fund, and research and development grants; (3) administration of fishery marketing councils; (4) administration of fishery products inspection and grading and product standard programs; (5) research and development on product safety, quality and use; and (6) advice to the U.S. Department of Agriculture on the use of its Surplus Commodity Program and export financing programs for fishery products.

*CENTRAL OFFICE*

Director
Office of Trade and Industry Services
1335 East-West Highway
Silver Spring, MD 20910
(301) 427-2351

Chief
Trade Services Division
Address same as above
(301) 427-2379

Chief
Financial Services Division
Address same as above
(301) 427-2390

Chief
Utilization Research and Services Division
Address same as above
(301) 427-2358

Chief
Inspection Services Division
(301) 427-2355

*NORTHEAST REGION*

Chief
Services Division
1 Blackburn Dr.
Gloucester, MA 01930
(508) 281-3600
TELEX: 940007 NMFS GLOS

Chief
Trade Analysis Branch
Address same as above
(508) 281-3600

Chief
Financial Services Branch
Address same as above
(508) 281-3600

*SOUTHEAST REGION*

Chief
Fisheries Development Division
9450 Koger Blvd.
St. Petersburg, FL 33702
(813) 893-3271

Chief
Trade Analysis Branch
Address same as above
(813) 893-3384

Chief
Financial Services Branch
9450 Koger Blvd.
St. Petersburg, FL 33702
(813) 893-3148

Chief
Economic Analysis Branch
Address same as above
(813) 893-3830

*NORTHWEST REGION*

Chief
Trade and Industry Services Division
7600 Sand Point Way N.E.
BIN C15700 (Building 1)
Seattle, WA 98115
(206) 526-6117
TWX: 910-444-2786 NMFS SEA
FAX: (206) 526-6426

Chief
Financial Services Branch
Address same as above
(206) 525-6122

*SOUTHWEST REGION*

Chief
Trade and Industry Services Division
300 South Ferry St.
Terminal Island, CA 90731
(213) 514-6677

Leader
Trade Analysis Program
Address same as above
(213) 514-6679

Chief
Financial Services Branch
Address same as above
(213) 514-6680

*ALASKA REGION*

Chief
Industry Services Division
P.O. Box 21668
Juneau, AK 99802
(907) 586-7224
TELEX: 45377 NMFS AKR JNU
FAX: (907) 586-7131

# GLOSSARY

**ANADROMOUS SPECIES**. These are species of fish that mature in the ocean, and then ascend streams to spawn in freshwater. In the Magnuson Act, these species include, but are not limited to, Atlantic and Pacific salmons, steelhead trout, and striped bass. See 42 FR 60682, Nov. 28, 1977.

**ANALOG PRODUCTS**. These include imitation and simulated crab, lobster, shrimp, scallops, and other fish and shellfish products fabricated from processed fish meat (such as surimi).

**BATTER-COATED FISH PRODUCTS**. Sticks and portions or other forms of fish or shellfish coated with a batter containing a leavening agent and mixture of cereal products, flavoring, and other ingredients, and partially cooked in hot oil a short time to expand and set the batter.

**BOAT, OTHER**. Commercial fishing craft not powered by a motor, e.g., rowboat or sailboat, having a capacity of less than 5 net tons. See motorboat.

**BREADED FISH PRODUCTS**. Sticks and portions or other forms of fish or shellfish coated with a non-leavened mixture containing cereal products, flavorings, and other ingredients. Breaded products are sold raw or partially cooked.

**BREADED SHRIMP**. Peeled shrimp coated with breading. The product may be identified as fantail (butterfly) and round, with or without tail fins and last shell segment; also known as portions, sticks, steaks, etc., when prepared from a composite unit of two or more shrimp pieces whole shrimp or a combination of both without fins or shells.

**BUTTERFLY FILLET**. Two skin-on fillets of a fish joined together by the belly skin. See fillets.

**CANNED FISHERY PRODUCTS**. Fish, shellfish, or other aquatic animals packed in cans, or other containers, which are hermetically sealed and heat-sterilized. Canned fishery products may include milk, vegetables, or other products. Most, but not all, canned fishery products can be stored at room temperature for an indefinite time without spoiling.

**COMMERCIAL FISHERMAN**. An individual who derives income from catching and selling living resources taken from inland or marine waters.

**CONSUMPTION OF EDIBLE FISHERY PRODUCTS**. Estimated amount of commercially landed fish, shellfish, and other aquatic animals consumed by the civilian population of the United States. Estimates are on an edible-weight basis and have been adjusted for beginning and ending inventories of edible fishery products. Consumption includes U.S. production of fishery products from both domestically caught and imported fish, shellfish, other edible aquatic plants, animals, and imported products and excludes exports and purchases by the U.S. Armed Forces.

**CONTINENTAL SHELF FISHERY RESOURCES**. These are living organisms of any sedentary species that at the harvestable stage are either (a) immobile on or under the seabed, (b) unable to move except in onstant physical contact with the seabed or subsoil of the continental shelf. The Magnuson Act now lists them as certain abalones, surf clam and ocean quahog, queen conch, Atlantic deep-sea red crab, dungeness crab, stone crab, king crabs, snow (tanner) crabs, American lobster, certain corals, and sponges.

**CURED FISHERY PRODUCTS**. Products preserved by drying, pickling, salting, or smoking; not including canned, frozen, irradiated, or pasteurized products. Dried products are cured by sun or air-drying; pickled or salted products are those products preserved by applying salt, or by pickling (immersing in brine or in a vinegar or other preservative solution); smoked products are cured with smoke or a combination of smoking and drying or salting.

**EDIBLE WEIGHT**. The weight of a seafood item exclusive of bones, offal, etc.

**EEZ**. See U.S. Exclusive Economic Zone.

**EUROPEAN ECONOMIC COMMUNITY (EEC)**. Belgium and Luxembourg, Denmark, Federal Republic of Germany, Greece, France, Ireland, Italy, Netherlands, Portugal, Spain, and United Kingdom.

**EXPORT VALUE**. The value reported is generally equivalent to f.a.s. (free alongside ship) value at the U.S. port of export, based on the transaction price, including inland freight, insurance, and other charges incurred in placing the merchandise alongside the carrier at the U.S. port of exportation. The value excludes the cost of loading, freight, insurance and other charges or transportation cost beyond the port of exportation.

**EXVESSEL PRICE**. Price received by the harvester for fish, shellfish, and other aquatic plants and animals.

**"FISH AND CHIPS"**. This United States fisheries policy links foreign fishing privileges in the U.S. EEZ to foreign country contributions to the development of the U.S. fishing industry. These include reductions of foreign tariff and non-tariff barriers that restrict importation of fishery products, and other cooperation in advancing opportunities for fishery trade. This policy was incorporated into the foreign

nation species allocation process as law by the 1980 amendments to the Magnuson Act.

**FISH BLOCKS**. Regular fish blocks are frozen blocks or slabs of fillets or pieces of fillets cut or sliced from fish. Minced fish blocks are frozen blocks or slabs of minced flesh produced by a meat and bone separating machine.

**FISH FILLETS**. The sides of fish that are either skinned or have the skin on, cut lengthwise from the backbone. Most types of fillets are boneless or virtually boneless; some may be labeled as "boneless fillets."

**FISH MEAL**. A high-protein animal feed supplement made by cooking, pressing, drying, and grinding fish or shellfish.

**FISH OIL**. An oil extracted from body (body oil) or liver (liver oil) of fish and marine mammals; mostly a byproduct of fish meal production.

**FISH PORTION**. A piece of fish flesh that is generally of uniform size with thickness of 3/8 of an inch or more and differs from a fish stick in being wider or of a different shape. A fish portion is generally cut from a fish block.

**FISH SOLUBLES**. A water-soluble protein byproduct of fish meal production. Fish solubles are generally condensed to 50 percent solids and marketed as "condensed fish solubles."

**FISH STEAK**. A cross-section slice cut from a large dressed fish. A steak is usually about 3/4 of an inch thick.

**FISH STICK**. An elongated piece of breaded fish flesh weighing not less than 3/4 of an ounce and not more than 1-1/2 ounces with the largest dimension at least three times that of the next largest dimension. A fish stick is generally cut from a fish block.

**FISHERY MANAGEMENT PLAN (FMP)**. A plan developed by a Regional Fishery Management Council, or the Secretary of Commerce under certain circumstances, to manage a fishery resource in the U.S. EEZ pursuant to the MFCMA (Magnuson Act).

**FISHING CRAFT, COMMERCIAL**. Boats and vessels engaged in capturing fish, shellfish, and other aquatic plants and animals for sale.

**FULL-TIME COMMERCIAL FISHERMAN**. An individual who receives more than 50 percent of their annual income from commercial fishing activities, including port activity, such as vessel repair and re-rigging.

**GROSS REGISTERED TONNAGE (GRT)**. The gross registered tonnage of a vessel is the internal cubic capacity of all space in and on the vessel that is permanently enclosed, with the exception of certain permissible exemptions. GRT is expressed in tons of 100 cubic feet.

**GROUNDFISH**. Broadly, fish that are caught on or near the sea floor. The term includes a wide variety of bottomfishes, rockfishes, and flatfishes. However, NMFS sometimes uses the term in a narrower sense. In import statistics shown in "Fisheries of the United States," the term applies to the following species: cod, cusk, haddock, hake, Atlantic pollock, and Atlantic ocean perch.

**IMPORT VALUE**. Value of imports as appraised by the U.S. Customs Service according to the Tariff Act of 1930, as amended. It may be based on foreign market value, constructed value, American selling price, etc. It generally represents a value in a foreign country, and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise to the United States.

**IMPORT WEIGHT**. The weights of individual products as exported, i.e., fillets, steaks, whole, headed, etc.

**INDUSTRIAL FISHERY PRODUCTS**. Items processed from fish, shellfish, or other aquatic plants and animals that are not consumed directly by humans. These items contain products from seaweeds, fish meal, fish oils, fish solubles, pearl essence, shark and other aquatic animal skins, and shells.

**INTERNATIONAL CONVENTION FOR THE NORTHWEST ATLANTIC FISHERIES (ICNAF)**. This convention, which entered into force on July 3, 1950, was for the investigation, protection, and conservation of the fishery resources of the Northwest Atlantic Ocean. In 1975, there were 18 member nations. The United States withdrew from ICNAF on December 31, 1976, because continued adherence to the convention was deemed incompatible with the extension of U.S. fishery management jurisdiction to 200 miles under the Magnuson Fishery Conservation and Management Act of 1976 (MFCMA). See Northwest Atlantic Fisheries Organization (NAFO).

**JOINT VENTURE**. An operation authorized under the MFCMA (Magnuson Act) in which a permitted foreign vessel receives fish in the U.S. EEZ from a U.S. vessel. The fish received from the U.S. vessel are part of the U.S. harvest.

# GLOSSARY

**LANDINGS, COMMERCIAL**. Quantities of fish, shellfish, and other aquatic plants and animals brought ashore and sold. Landings of fish may be in terms of round (live) weight or dressed weight. Landings of crustaceans are generally on a live-weight basis except for shrimp which may be on a heads-on or heads-off basis. Mollusks are generally landed with the shell on, but for some species only the meats are landed, such as sea scallops. Data for all mollusks are published on a meat-weight basis.

**MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT, Public Law 94-265, as amended**. The Magnuson Act provides a national program for the conservation and management of fisheries to allow for an optimum yield (OY) on a continuing basis and to realize the full potential of the Nation's fishery resources. It established the U.S. Exclusive Economics Zone (EEZ) (formerly the FCZ - Fishery Conservation Zone) and a means to control foreign and certain domestic fisheries through PMPs and FMPs. Within the U.S. EEZ, the United States has exclusive management authority over fish (meaning finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals, birds, and highly migratory species of tuna). The Magnuson Act provides further exclusive management authority beyond the U.S. EEZ for all continental shelf fishery resources and all anadromous species throughout the migratory range of each such species, except during the time they are found within any foreign nation's territorial sea or fishery conservation zone (or the equivalent), to the extent that such a sea or zone is recognized by the United States.

**MARINE RECREATIONAL FISHING**. Fishing for pleasure, amusement, relaxation, or home consumption. If part or all of the catch is sold, the monetary returns constitute an insignificant part of the person's income.

**MARINE RECREATIONAL CATCH**. Quantities of finfish, shellfish and other living aquatic organisms caught, but not necessarily brought ashore, by marine recreational fisherman.

**MARINE RECREATIONAL FISHERMEN**. Those people who fish in marine waters primarily for recreational purposes. Their catch is primarily for home consumption, although occasionally a part or all of their catch may be sold and enter commercial channels.

**MAXIMUM SUSTAINABLE YIELD (MSY)**. MSY from a fishery is the largest annual catch or yield in terms of weight of fish caught by both commercial and recreational fishermen that can be taken continuously from a stock under existing environmental conditions. A determination of MSY, which should be an estimate based upon the best scientific information available, is a biological measure necessary in the development of optimum yield.

**METRIC TONS**. A measure of weight equal to 1,000 kilograms, 0.984 long tons, 1.1023 short tons, or 2,204.6 pounds.

**MOTORBOAT**. A motor-driven commercial fishing craft having a capacity of less than 5 net tons, or not officially documented by the Coast Guard. See "boat, other."

**NORTHWEST ATLANTIC FISHERIES ORGANIZATION (NAFO)**. This convention, which entered into force January 1, 1979, replaces ICNAF. NAFO provides a forum for continued multilateral scientific research and investigation of fishery resources that occur beyond the limits of coastal nations' fishery jurisdiction in the northwest Atlantic, and will ensure consistency between NAFO management measures in this area and those adopted by the coastal nations within the limits of their fishery jurisdiction.

**OPTIMUM YIELD (OY)**. In the MFCMA (Magnuson Act), OY with respect to the yield from a fishery, is the amount of fish that (1) will provide the greatest overall benefit to the United States, with particular reference to food production and recreational opportunities; and (2) is prescribed as such on the basis of maximum sustainable yield from such fishery, as modified by any relevant ecological, economic, or social factors.

**PACKAGED FISH**. A term used in NMFS publications prior to 1972 to designate fresh or frozen raw fish fillets and steaks.

**PART-TIME COMMERCIAL FISHERMAN**. An individual who receives less than 50 percent of their annual income from commercial fishing activities.

**PER CAPITA CONSUMPTION**. Consumption of edible fishery products in the United States divided by the total civilian population. In calculating annual per capita consumption, estimates of the civilian resident population of the United States on July 1 of each year are used. These estimates are taken from current population reports, series P-25, published by the U.S. Bureau of the Census.

**PER CAPITA USE**. The use of all fishery products, both edible and nonedible, in the United States divided by the total population of the United States.

**PRELIMINARY FISHERY MANAGEMENT PLAN (PMP).** The Secretary of Commerce prepares a PMP whenever a foreign nation with which the United States has made a Governing International Fishery Agreement (GIFA) submits an application to fish in a fishery not managed by an FMP. A PMP is replaced by an FMP as soon as the latter is implemented. A PMP applies only to foreign fishing.

**RETAIL PRICE.** The price of fish and shellfish sold to the final consumer by food stores and other retail outlets.

**ROUND (LIVE) WEIGHT.** The weight of fish, shellfish, or other aquatic plants and animals as taken from the water; the complete or full weight as caught. The tables on world catch found in this publication include, in the case of mollusks, the weight of both the shells and the meats, whereas the tables on U.S. landings include only the weight of the meats.

**SURIMI.** Minced fish meat (usually Alaska pollock) which has been washed to remove fat and undesirable matters (such as blood, pigments, and odorous substances), and mixed with cryoprotectants, such as sugar and/or sorbitol, for a good frozen shelf life.

**TOTAL ALLOWABLE LEVEL OF FOREIGN FISHING (TALFF).** The TALFF, if any, with respect to any fishery subject to the exclusive fishery management authority of the United States, is that portion of the optimum yield of such fishery which will not be harvested by vessels of the United States, as determined by provisions of the MFCMA.

**U.S. EXCLUSIVE ECONOMIC ZONE (EEZ).** The MFCMA (Magnuson Act) defines this zone as contiguous to the territorial sea of the United States and extending seaward 200 nautical miles measured from the baseline from which the territorial sea is measured. This was formerly referred to as the FCZ (Fishery Conservation Zone).

**U.S.-FLAG VESSEL LANDINGS.** Includes landings by all U.S. fishing vessels regardless of where landed as opposed to landings at ports in the 50 United States. These include landings at foreign ports, U.S. territories, and foreign vessels in the U.S. FCZ under joint venture agreements. U.S. law prohibits vessels constructed or registered in foreign countries to land fish catches at U.S. ports.

**U.S. TERRITORIAL SEA.** A zone extending 3 nautical miles from shore for all states except Texas and the Gulf Coast of Florida where the seaward boundary is 3 marine leagues (9 nautical miles).

**USE OF FISHERY PRODUCTS.** Estimated disappearance of the total supply of fishery products, both edible and nonedible, on a round-weight basis without considering beginning or ending stocks, exports, military purchases, or shipments to U.S. territories.

**VESSEL.** A commercial fishing craft having a capacity of 5 net tons or more. These craft are either enrolled or documented by the U.S. Coast Guard and have an official number assigned by that agency.

**WHOLESALE FISH AND SHELLFISH PRICES.** Those prices received at principal fishery markets by primary wholesalers (processors, importers, and brokers) for customary quantities, free on board (f.o.b.) warehouse.

# STATISTICAL SUBJECT INDEX

(Reference gives page number)


CLAMS
Canned, 39
Exports, 52
Imports, 46
Landings, 2, 8, 12, 65
Supply, 65
Value of landings, 2, 8, 12

CONSUMPTION
Canned, 72, 74
Cured, 72
Fillets and steaks, 74
Fresh and frozen, 72
Per capita, by country, 76
Per capita, U.S., 72
Salmon, canned, 74
Sardines, canned, 74
Shellfish, canned, 74
Shrimp, 74
Sticks and portions, 74
Tuna, canned, 74

CRABS
Canned, 39, 66
Exports, 52
Frozen holdings, 43
Imports, 46, 66
Landings, 2, 8, 12, 66
Supply, 66
Value of landings, 2, 8, 12

CRAFT, FISHING
Motorboats, 82
Vessels, 82

DISPOSITION OF LANDINGS
United States, 3
World, 34

DUTIES COLLECTED, 45

EMPLOYMENT
Establishments, 82
Fishermen, 82
Processing and wholesaling, 84

EXPORTS
All fishery products, 52
Crabs, 57
Crabmeat, 57
Continent and country, by, 53
Cured, 52
Edible, by years, 54
Fish meal, 52, 58, 70
King crab, 66
Nonedible, by years, 54
Oils, 52, 58, 70
Principal items, 52
Salmon, canned, 52, 65
Salmon, fillets, 52, 56

EXPORTS - continued
Salmon, whole or eviscerated, 52, 56
Sardines, canned, 52, 65
Shrimp, canned, 52, 55, 69
Shrimp, domestic and foreign products, 55, 69
Shrimp, fresh and frozen, 52, 55, 69
Snow (tanner) crab, 66
Squid, canned, 52
Value, by years, 54
Volume, by years, 54

EXCLUSIVE ECONOMIC ZONE, THE U.S.
Foreign catch, by continent and country 27
Foreign catch, by species and area, 28
Foreign catch, by country and species, 29, 30

FLOUNDERS
Fillets, 38
Frozen holdings, 43
Landings, 1, 6, 10
Value of landings, 1, 6, 10
World catch, 34

GROUNDFISH FILLETS AND STEAKS
Fillets, supply, 63
Imports, 46, 48

HALIBUT
Fillets, 38
Frozen holdings, 43
Exports, 52
Imports, 46
Landings, 1, 6, 10
Steaks, 38
Value of landings, 1, 6, 10
World catch, 34

HERRING, SEA
Canned (sardines), 39
Consumption (sardines), per capita, 74
Exports (sardines), 52
Imports (sardines), 46
Landings, 1, 6, 10
Value of landings, 1, 6, 10
World catch, 34
Whole eviscerated, 57

IMPORTS
All fishery products, 46, 47
Blocks and slabs, 46, 48, 63
Clams, canned, 46
Continent and country, by, 47
Crabmeat, canned, fresh and frozen, 46, 66

IMPORTS - continued
Cured, 46
Duties collected, 45
Edible, 45, 46, 47, 60, 61
Fillets, groundfish, 46, 48
Fillets, other than groundfish and ocean perch, 46
Finfish, 62
Groundfish, 46
Halibut, 46
Herring, canned, 46
Industrial, 60, 61
Lobsters, canned, 46, 67
Lobsters, fresh and frozen, 46, 67
Meal and scrap, 46, 70
Nonedible, 45, 46, 47
Oils, 46, 70
Oysters, canned, 46
Principal items, 46
Quota, canned tuna, not in oil, 49
Salmon, canned, 46, 65
Salmon, fresh and frozen, 46
Sardines, canned, 46, 65
Scallop meats, 46, 68
Shellfish, 62
Shrimp, by country, 50
Shrimp, by products, 51
Tuna, canned, 46, 49, 64
Tuna, fresh and frozen, 46
Value, by years, 45, 46
Volume, by year, 45, 46

INSPECTION
Establishments and amount inspected, 85

JOINT VENTURE, 17

LANDINGS
Disposition, 3
Foreign shores, off, 6, 10
Human food (edible), 3
Industrial, 3
Months, by, 3
Ports, major U.S., 5
Record year, by States, 4
Regions, by, 4
Shrimp historical, 14
Species, by, 1
States, by, 4
U.S., 1, 3
U.S., Shores, distance from, 6, 10
World, 31, 32, 33, 34

LOBSTERS, AMERICAN
Imports, 46, 67
Landings, 2, 8, 12
Landings, Historical, 14
Supply, 67
Value of landings, 2, 8, 12

# STATISTICAL SUBJECT INDEX

(Reference gives page number)


LOBSTER, SPINY
Frozen holdings, 43
Imports, 46, 67, 71
Landings, 2, 8, 12
Landings Historical, 15
Supply, 67
Value of landings, 2, 8, 12

MACKERELS
Landings, 1, 6, 10
Meal, 42
Value of landings, 1, 6, 10
World catch, 34

MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT (MFCMA)
Allocations by country and region, 89
Allocations by species and country, 90
Fees, foreign fishing, 86
General description, 86
Regional Fishery Management Councils, 88

MEAL AND SCRAP
Exports, 52, 58, 70
Imports, 46, 51, 70
Landings, disposition, 3
Mackerel, 42
Menhaden, 42
Production, U.S., 42
Supply, 70
Tuna, 42
World, disposition, 34

MENHADEN
Landings, 1, 7, 11
Meal, 42
Oil, 42
Value of landings, 1, 7, 11

OIL
Exports, 52, 58, 70
Imports, 46, 70
Menhaden, 42
Production, 42
Supply, 70
World, disposition, 34

OYSTERS
Canned, 39
Imports, 46, 68
Landings, 2, 9, 11
Supply, 68
Value of landings, 2, 9, 11

PLANTS AND FIRMS
Employment, 82, 84
Processors and wholesalers, 84
Producing canned, industrial products, and fillets and steaks, 83

PRICES, Exvessel index, 78

PROCESSING
Animal food and bait, canned, 37
Canned products, 37
Canned, by year, 41
Clams, canned 39
Crabs, canned, 39, 66
Employment in, 82, 84
Fillets and steaks, fresh and frozen, 38
Frozen holdings, 43
Industrial products, 42
Meal, oil, 42
Oysters, canned, 39
Plants, number of, 82, 83, 84
Salmon canned, 39, 40, 65
Sardines, canned, 39, 65
Shrimp, canned, 39, 69
Sticks, portions, and breaded shrimp, 37
Tuna, canned, 39, 40, 64
Value, processed products, 37

RECREATIONAL FISHERIES,
Marine, 18

SALMON
Canned, 39, 40, 65
Consumption, per capita, 74
Exports, 52, 56, 65
Frozen holdings, 43
Imports, 46
Landings, 1, 7, 11
Supply, canned, 65
Value of landings, 1, 7, 11
World catch, 34

SARDINES
Canned, 39, 65
Consumption, per capita, 74
Exports, 52, 65
Imports, 46, 65
Supply, canned, 39
World catch, 34

SCALLOPS
Exports, 52
Imports, 46
Landings, 2, 9, 13
Supply, 68
Value of landings, 2, 9, 13

SHRIMP
Breaded, 37
Canned, 39, 40, 69
Consumption, per capita, 74
Exports, 52, 55, 69
Frozen holdings, 43
Imports, 46, 50, 51, 69
Landings, head-off, 69
Landings, head-on, 2, 9, 13
Supply, canned, 69

SHRIMP - continued
Supply, total, 69
Value of landings, 2, 9, 13

SUPPLY
All fishery products, 60, 61, 62
Blocks, 63
Clam meats, 65
Crabs, fresh and frozen, canned, 66
Edible fishery products, 60, 61, 62
Fillets and steaks, all, 63
Fillets and steaks, groundfish, 63
Finfish, 62
Industrial fishery products, 60, 61, 62
Lobsters, American, 67
Lobsters, spiny, 67
Meal, 70
Meal and solubles, 70
Oils, 70
Oysters, 68
Salmon, canned, 65
Sardines, canned, 65
Scallop meats, 68
Shellfish, 62
Shrimp, 69
Shrimp, canned, 69
Tuna, canned, 64

TUNA
Canned, 39, 40, 64
Consumption, per capita, 74
Imports, 46, 49, 64
Landings, 2, 8, 12, 64
Meal, 42
Quota, imports, canned, 49
Supply, canned, 64
Value of landings, 2, 8, 12
World catch, 34

USE
Per capita, 75
Landings, by month, 3
Valued added, 80

WHITING
Frozen holdings, 43
Landings, 2, 8, 12
Value of landings, 2, 8, 12

WORLD FISHERIES
Catch by countries, 32
Catch by continents, 33
Catch by major fishing areas, 33
Catch by species groups, 34
Catch by years, 31
Disposition, 34
Imports and exports value, 35
Per capita consumption, by country, 77

Let Us Be Your Guide . . .

# Commerce Publications Update

. . . to the latest publications and press releases on business, the economy, trade, census trends, scientific and technical developments, and related topics from the U.S. Department of Commerce.

Every 2 weeks, *Commerce Publications Update* lists dozens of new titles from the International Trade Administration, Census Bureau, National Bureau of Standards, National Oceanic and Atmospheric Administration, and other areas of the Department. Each listing includes number of pages, price, and complete ordering information and—in the case of major reports—a brief description of the contents.

Begin now to take advantage of this easy-to-use guide to a broad range of Government information.

**Enter your subscription to the *Commerce Publications Update* by completing and mailing the order form below, today.**

## Superintendent of Documents Subscriptions Order Form

Order Processing Code
*** 6370**

***Charge your order. It's easy!*** MasterCard VISA

☐ **YES,** please send me the following indicated subscriptions: You can fax your order to (202) 275-0019.

_____Subscriptions of **COMMERCE PUBLICATIONS UPDATE,** for $21.00 each per year.

1. The total cost of my order is $_____ . All prices include regular domestic postage and handling and are subject to change. International customers please add 25%.

**Please Type or Print**

2. _____
(Company or personal name)

_____
(Additional address/attention line)

_____
(Street address)

_____
(City, State, ZIP Code)

(_____)
_____
(Daytime phone including area code)

3. **Please choose method of payment:**
☐ Check payable to the Superintendent of Documents
☐ GPO Deposit Account ☐☐☐☐☐☐☐☐-☐☐
☐ VISA or MasterCard Account
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

_____
(Credit card expiration date)

***Thank you for your order!***

_____
(Signature)

4. **Mail To:** Superintendent of Documents, Government Printing Office, Washington, D.C. 20402-9371

12/89

# Federal Inspection Marks For Fishery Products

**FISHERY PRODUCTS ARE VOLUNTARILY INSPECTED.** Beef and poultry, as well as many other perishable food items, are federally inspected at various stages of processing to ensure buyers that the product is safe, wholesome, and acceptable. Fishery products have no similar mandatory federal inspection program; however, the U.S. Department of Commerce (USDC) provides a voluntary inspection program for fishery products. Seafood processors, packers, brokers, and users who are interested in having USDC inspect their products may subscribe voluntarily to the program. Users of the service pay for USDC inspection which evaluates their raw materials, ensures the hygienic preparation of products, and certifies the final quality and condition of the product. The USDC inspector functions as an objective observer in evaluating processing techniques and product quality and condition. Products packed in plants under USDC inspection can carry marks for easy consumer identification.

**FEDERAL INSPECTION MARKS.** Federal inspection marks are official marks approved by the Secretary of Commerce and authorized for use on brand labels of fishery products. When displayed on product labels, these marks signify that inspectors licensed by the USDC inspected, graded, and certified the products as having met all the requirements of inspection regulations, and have been produced in accordance with official U.S. grade standards or approved specifications.

**WHAT DO THE INSPECTION MARKS MEAN?** The distinctive inspection marks are symbols that signify two distinct but related functions in guiding the consumer to safe, wholesome products produced in a sanitary environment and packed in accordance with uniform quality standards under the supervision of the USDC's voluntary inspection service. The functions symbolized by each mark follow:

**"U.S. GRADE" MARK.**
The "U.S. Grade" mark signifies that:

1. The product is clean, safe, and wholesome.

2. The product is of a specified quality, identified by the appropriate U.S. Grade designation, as determined by a federally-licensed inspector in accordance with established requirements in U.S. Grade Standards.

3. The product was produced in an acceptable establishment with proper equipment and in an appropriate processing environment as required by food control authorities.

4. The product was processed under supervision by federally-licensed food inspectors and packed in accordance with specific Good Manufacturing Practice Requirements.

5. The product is truthfully and accurately labeled as to common or usual name, optional ingredients, and quantity.

**"PACKED UNDER FEDERAL INSPECTION" MARK.** "Packed Under Federal Inspection" may be displayed as an official mark or as an official statement on the product label. The mark or statement signifies that the properly labeled product is clean, safe, and wholesome and has been produced in an acceptable establishment with appropriate equipment under the supervision of federally-licensed inspectors. The product has not been graded as to a specific quality level; rather, it is an acceptable commercial quality as determined by Federal inspectors in accordance with approved standards or specifications.

## FOR FURTHER INFORMATION

Northeast Inspection Branch
National Marine Fisheries Service
One Blackburn Drive
Gloucester, MA 01930
(508) 281-9300

Southeast Inspection Branch
National Marine Fisheries Service
Duval Building
9450 Koger Blvd.
St. Petersburg, FL 33702
(813) 893-3155

National Seafood Inspection Laboratory
National Marine Fisheries Service
3209 Frederic St.
P.O. Drawer 1207
Pascagoula, MS 39567
(601) 762-7402

Western Inspection Branch
National Marine Fisheries Service
5600 Rickenbacker Road
Building No. 7
Bell, CA 90201
(213) 894-5369

Inspection Services Division
National Marine Fisheries Service
1335 East-West Highway
Silver Spring, MD 20910
(301) 427-2355

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service F/RE1
1335 East West Highway
Silver Spring, MD 20910

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
COM-210

FIRST CLASS MAIL

U.S.MAIL

OFFICIAL BUSINESS